













Merton's Local Plan Sustainability Appraisal incorporating Strategic Environmental Assessment (SEA): **Stage A** November 2018

Non-technical summary

- I. This report is the Strategic Environmental Assessment (SEA) and Sustainability Appraisal for Merton's new Local Plan, Scoping Report.
- II. SEA Regulations 2004 Schedule 2 (6) states that:

The likely significant effects on the environment, including short, medium and long term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as—

- a) biodiversity;
- b) population;
- c) human health;
- d) fauna:
- e) flora;
- f) soil;
- g) water;
- h) air;
- i) climatic factors;
- i) material assets;
- k) cultural heritage, including architectural and archaeological heritage;
- I) landscape; and
- m) the inter-relationship between the issues
- III. The purpose of Sustainability Appraisal (incorporating SEA) is to promote sustainable development by integrating *social, economic*, and *environmental* considerations into the preparation of new or revised plans and strategies. It is imperative to commence SEA at the early stages of plan making to identify the key sustainability issues likely affected by the implementation of the plan; it assists with creating development options and assesses any significant effects of the proposed development. SA/SEA's are an important tool for developing sound planning policies and planning

development plans which are consistent with the Government's sustainable development agenda and achieving the aspirations of local communities.

The SEA process

IV. The SEA process is an iterative process informing each consultation stage of the Local Plan's development. The ultimate aim of the SEA is to decide which impacts are likely to be significant and therefore, what the assessment should concentrate on. This has been achieved by the selection of SEA objectives and indicators which will be used to measure the impact of the plan.

Stage A: The Scoping Report

V. The purpose of this stage is to compile the background information needed for the SEA and at what level of detail.

Information will be collected on environmental and social conditions in Merton and how these are likely to change and how transport can help to achieve the targets and strategies of other plans and programme. The SEA scoping process provides a selection of SEA objectives, which will be used as criteria to assess the Plan against.

Stage B: Developing and refining alternatives and assessing effects

VI. SEA governing regulations require that each responsible authority (in this case the council) confirms the scope of the Environmental Report and what alternatives and types of effect to assess. In conducting a SEA, responsible authorities must appraise the likely significant environmental effects of implementing the Local Plan and any reasonable alternatives (options). The results of the assessment of alternatives will help in the selection of the preferred *'options'* for the plan /strategy and could also help in determining the priorities for delivery of these options.

Stage C: Preparing the Environmental Report and consultation

VII. The main output of the SEA process is the Environmental Report which will be available for public consultation along with the draft Plan. The report presents information on the effects of the draft Plan.

Stage D: Production of the SEA Statement

VIII. Following adoption of the Plan and in order to meet the requirement of the SEA Directive; the council is required to produce an SEA Statement. This Statement will state how the findings from the SEA and consultation results have been taken into account. This SEA Statement should be made available to stakeholders.

Stage E: Monitoring of SEA

IX. The SEA Directive specifically requires monitoring of the significant environmental effects of the Plan. The council will be producing a monitoring system to monitor 'significant effects'.

SEA objectives

X. The ultimate aim of the SEA is to decide which impacts are likely to be significant and what the assessment should concentrate on. This is achieved through the selection of SEA objectives and indicators; which will be used to measure the impact of the plan/strategy.

Figure 1: Stages in the SEA process

SEA stages and tasks	Purpose	
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope		
Identifying other relevant plans, programmes and environmental protection objectives	To establish how the plan or programme is affected by outside factors, to suggest ideas for how any constraints can be addressed, and to help to identify SEA objectives.	
Collecting baseline information	To provide an evidence base for environmental problems, prediction of effects, and monitoring; to help in the development of SEA objectives.	
Identifying environmental problems	To help focus the SEA and streamline the subsequent stages, including baseline information analysis, setting of the SEA objectives, prediction of effects and monitoring.	
Developing SEA objectives	To provide a means by which the environmental performance of the plan or programme and alternatives can be assessed.	
Consulting on the scope of SEA	To ensure that the SEA covers the likely significant environmental effects of the plan or programme.	
Stage B: Developing and refining alternatives a	and assessing effects	
Testing the plan or programme objectives against the SEA objectives Developing strategic alternatives	To identify potential synergies or inconsistencies between the objectives of the plan or programme and the SEA objectives and help in developing alternatives. To develop and refine strategic alternatives.	
Predicting the effects of the plan or programme, including alternatives	To predict the significant environmental effects of the plan or programme and alternatives.	
Evaluating the effects of the plan or programme, including alternatives	To evaluate the predicted effects of the plan or programme and its alternatives and assist in the refinement of the plan or programme.	

Mitigating adverse effects	To ensure that adverse effects are identified and potential mitigation measures are considered.	
Proposing measures to monitor the environmental effects of plan or programme implementation	To detail the means by which the environmental performance of the plan or programme can be assessed.	
Stage C: Preparing the Environmental Report		
Preparing the Environmental Report	To present the predicted environmental effects of the plan or programme, including alternatives, in a form suitable for public consultation and use by decision-makers.	
Stage D: Consulting on the draft plan or progra	mme and the Environmental Report	
Consulting the public and Consultation Bodies on the draft plan or programme and the Environmental Report	To give the public and the Consultation Bodies an opportunity to express their opinions on the findings of the Environmental Report and to use it as a reference point in commenting on the plan or programme.	
	To gather more information through the opinions and concerns of the public.	
Assessing significant changes	To ensure that the environmental implications of any significant changes to the draft plan or programme at this stage are assessed and taken into account.	
Making decisions and providing information	To provide information on how the Environmental Report and consultees' opinions were taken into account in deciding the final form of the plan or programme to be adopted.	
Stage E: Monitoring the significant effects of implementing the plan or programme on the environment		
Developing aims and methods for monitoring	To track the environmental effects of the plan or programme to show whether they are as predicted; to help identify adverse effects.	
Responding to adverse effects	To prepare for appropriate responses where adverse effects are identified.	

Sustainability appraisal process Local Plan preparation Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope 1. Identify other relevant policies, plans and programmes, and sustainability objectives: Evidence gathering and 2. Collect baseline information engagement 3. Identify sustainability issues and problems 4. Develop the sustainability appraisal framework 5. Consult the consultation bodies on the scope of the sustainability appraisal report Stage B: Developing and refining alternatives and assessing effects 1. Test the Local Pian objectives against the Consult on Local Plan in preparation sustainability appraisal framework (regulation 18 of the Town and 2. Develop the Local Plan options including reasonable Country Planning (Local Planning) alternatives (England) Regulations 2012). 3. Evaluate the likely effects of the Local Plan and Consultation may be undertaken more alternatives than once if the Local Planning Authority 4. Consider ways of mitigating adverse effects and considers necessary. maximising beneficial effects. 5. Propose measures to monitor the significant effects of implementing the Local Plan Stage C: Prepare the publication Stage C: Prepare the sustainability appraisal report version of the Local Plan Seek representations on the Stage D: Seek representations on the sustainability appraisal report from consultation publication Local Plan (regulation 19) from consultation bodies and bodies and the public the public Submit draft Local Plan and supporting documents for independent examination Outcome of examination Consider implications for SA/SSA compliance Local Plan Adopted Stage E: Post adoption reporting and monitoring 1. Prepare and publish post-adoption statement 2. Monitor significant effects of implementing the Local Monitor and report on the implementation of the Local Plan. 3. Respond to acverse effects

Figure 2: Sustainability Appraisal process and Local Plan preparation

What is the new Local Plan?

- XI. Merton has many assets, including superb transport links, beautiful open green spaces, heritage buildings, and a lively business sector.
- XII. We are creating a new Local Plan to provide a sound basis for planning decisions. We know how important good planning decisions are for Merton residents, as they impact on the appearance of the local environment and how people use it. At the same time, it is in the interest of all who live and work in Merton to attract new talent and new business to enhance the borough's resilience to external change, sustain a buoyant long-term economy and ensure a quality built environment for generations to come.
- XIII. The plan is designed to help guide how the borough develops over time and create a vision that enables the council to successfully and responsibly manage growth, while always ensuring the best interests of the borough, its residents and businesses. Merton is rich in assets and the opportunities they inevitably create. It is a place ripe for sustained economic success, and the Local Plan will mean that for years to come there will be a sound and consistent approach to ensuring a bright future for the borough and all who live and work here.

Figure 3: Local Plan timetable

Stages	Dates
Draft Plan	October 2018
Public enquiry	Winter 2019
Adoption	Winter 2020

Technical report

- 1 Purpose of Sustainability Appraisal and Strategic Environment Assessment (SEA)
- The EU Strategic Environmental Assessment Directive 2001/42/EC (SEA Directive), implemented in the UK by the SEA Regulations 2004, requires environmental assessment to be undertaken on all plans and programmes where they are likely to have significant environmental impacts.
- 1.2 SEA Regulations 2004 Schedule 2 (6) states that: The likely significant effects on the environment, including short, medium and long term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as
 - n) biodiversity;
 - o) population;
 - p) human health;
 - q) fauna;
 - r) flora;
 - s) soil;
 - t) water;
 - u) air;
 - v) climatic factors;
 - w) material assets;
 - x) cultural heritage, including architectural and archaeological heritage;
 - y) landscape; and
 - z) the inter-relationship between the issues

- The purpose of Sustainability Appraisal (incorporating SEA) is to promote sustainable development by integrating *social, economic*, and *environmental* considerations into the preparation of new or revised plans and strategies. It is imperative to commence SEA at the early stages of plan making to identify the key sustainability issues likely affected by the implementation of the plan; it assists with creating development options and assesses any significant effects of the proposed development. SA/SEA's are an important tool for developing sound planning policies and planning development plans which are consistent with the Government's sustainable development agenda and achieving the aspirations of local communities.
- 1.4 The purpose of this Scoping Report is to:
 - ldentify the sustainability objectives of other relevant plans, programmes, policies, and strategies.
 - Collect and collate baseline information and establish a profile of the environmental, social, and economic characteristics
 - Identify sustainability issues and problems
 - Develop the sustainability appraisal framework, used to test the development plan document and options within the plan.
- 1.5 The criteria for determining the significance of effects are taken from schedule 19(2) (a) and 10(4) (a) of the Environmental Assessment of Plans and Programmes Regulations 2004 and are redefined in Appendix 1. These split into criteria related to:
 - i. the scope and influence of the document
 - ii. the type of impact and area likely affected
- The regulations apply to a wide range of plans and programmes from local to regional level, including Local Plan documents. At the conclusion of plan preparation, the final SA/SEA report should show how the final plan has addressed the sustainability agenda and the choices made between alternative policies and proposals. The Inspector, when determining the soundness of the plan at the Public Examination stage, will consider this.
- 1.7 The NPPF states that assessments should be proportionate and should not repeat policy assessment that has already been undertaken. Wherever possible the local planning authority should consider how the preparation of any assessment will contribute to the plan's evidence base. The process should be started early in the plan

making process and key stakeholders should be consulted in identifying the issues that the assessment must cover

- This Scoping Report is based on the Scoping Report originally produced for the Core Strategy (2011) and the Site and Polices Plan (2014) known collectively as Merton's Local Plan. The SA baseline information, evidence and analysis are continually under review in an attempt to be as up to date as possible in order to inform the production process of the Local Plan. Due to current Government changes to the planning system and ongoing reviews of Government guidance, it cannot be guaranteed that all the data and documents used for this report are up to date. In addition whilst this Scoping Report has been specifically produced to support the Local Plan, it may also be used to support the appraisal of other future documents prepared under the Local Plan.
- The Authority's Monitoring Report (AMR) will be the means of monitoring the SA indicators identified on a regular basis. As well as the baseline information included in this report, research may be undertaken for the Local Plan, which will form the evidence base for the Plan. The results of this research will be fed into the SA process and AMRs when available.

2 Other assessments

National Planning Policy Framework (NPPF), acknowledges the need for and the importance of environmental assessment; however states in paragraph 167 that:

Assessments should be proportionate, and should not repeat policy assessment that has already been undertaken. Wherever possible the local planning authority should consider how the preparation of any assessment will contribute to the plan's evidence base. The process should be started early in the plan-making process and key stakeholders should be consulted in identifying the issues that the assessment must cover.

Habitat Regulation Assessments

- The EU directive on the conservation of natural habitats and wild fauna and flora1, also referred to as the 'habitats directive', provides legal protection for habitats of exceptional European importance. Article two of the directive requires the restoration and maintenance of habitats and species to a favourable conservation status and subsequent articles set up the means to designate protection areas. These are either set up as special areas of conservation (sac) or special protection areas (spa) depending on the protection aim.
- In order that these designated areas are protected the Habitats Directive has set the requirement for plans and projects to be assessed for their likely impact on them; in order to ensure that they do not have a negative impact. The assessment is to ensure that any significant effects are identified and avoided.
- The Conservation (Natural Habitats &c) Regulations 1994 have been amended to implement a judgement of the European Court of Justice. The amended Regulations came into force in 2007. The effect of the Regulations (as amended) is to add Part IVA (Regulations 85A -85E) under the title "Appropriate Assessments for Land Use Plans in England and Wales".
- The essential requirement of this amendment is for the Local Planning Authority (LPA) in this case Merton Council; to assess the potential effects of land use plans, to ensure that the protection and integrity of European Sites is considered by the planning process at a local level. The process by which this is achieved is by way of a Habitats Regulations Assessment (HRA). The HRA assess the impacts of a land-use Plan against the conservation objectives of sites and to ascertain whether it would adversely affect the integrity of that site.
- 2.7 The European Sites network (also known as Natura 2000) provides for the protection of sites that are of exceptional importance for rare, endangered or vulnerable natural habitats and species within the European Community. These sites consist of Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Offshore Marine Site (OMS).

¹ http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index en.htm

Ramsar sites (wetlands of international importance) are included as if they are fully designated European Sites for the purpose of considering development proposals that may affect them.

Health Impact Assessments

2.8 The purpose of HIA is to promote sustainable development by integrating health (including mental health) and wellbeing considerations into the preparation of plans or strategies; by identifying the key health and wellbeing issues and the groups that are likely to be affected by the implementation of the Plan.

Equalities Impact Assessment

2.9	The Equality Act 2010 replaces previous anti-discrimination laws with a single Act, making the law easier to understand
	and strengthening protection; and sets out the different ways in which it's unlawful to treat someone. Before the Act
	came into force there were several pieces of legislation to cover discrimination, including:

)	Sex Discrimination Act 1975
	Race Relations Act 1976
	Disability Discrimination Act 1995

At the decision making stage local authorities are required to assess how changes to polices and service delivery will affect different people. In 2011, the Act extended protection against discrimination to nine 'Protected Characteristics'-which includes the following:

J	Age	Sexual Orientation
J	Disability	Gender Reassignment
J	Sex/Gender	Marriage and Civil Partnership
J	Race or belief	Pregnancy and Maternity
J	Religion	

The purpose of the EqIA is to assess the impact of a policy, strategy or service in the borough in terms of race, gender and disability. The consideration of religion, age and sexual orientation are also encouraged.

3 Compliance with the SEA Directive/Regulations

This SEA/SA Scoping Report includes some elements of the final 'Environmental Report' (as required by the EU SEA Directive). Figure x below signposts the relevant sections of this Report that are considered to meet the SEA Directive requirements. The remainder are required to be met in the next stages of the SEA Environment Reports. This table will be included in the full SEA/SA Report at each stage of the SEA/SA to show how the SEA Directive requirements have been met.

Figure 4: Compliance to the SEA Directive (scoping Report)

	Where addressed in the Scoping Report
SEA Directive Article 3: Scope	Sections 1- 12
1. An environmental assessment, in accordance with Articles 4 to 9 shall be carried out for plans and programmes referred to in paragraphs 2 to 4 which are likely to have significant environmental effects.	OCCURNIS 1 12
2. Subject to paragraph 3, an environmental assessment shall be carried out for all plans and programmes, (a) which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II to Directive 85/337/EEC, or (b) Which, in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of Directive 92/43/EEC	n/a

	Where addressed in the Scoping Report
Article 4: General obligations 1. The environmental assessment referred to in Article 3 shall be carried out during the preparation of a plan or programme and before its adoption or submission to the legislative procedure. 2. The requirements of this Directive shall either be integrated into existing procedures in Member States for the adoption of plans and programmes or incorporated in procedures established to comply with this Directive. 3. Where plans and programmes form part of a hierarchy, Member States shall, with a view to avoiding duplication of the assessment, take into account the fact that the assessment will be carried out, in accordance with this Directive, at different levels of the hierarchy. For the purpose of, inter alia, avoiding duplication of assessment, Member States shall apply Article 5(2) and (3).	Section 1- 12

	Where addressed in the Scoping Report
SEA Directive	
Article 6: Consultations	
	Section 1.
1. The draft plan or programme and the environmental report prepared in	
accordance with Article 5 shall be made available to the authorities referred	
to in paragraph 3 of this Article and the public.	
2. The authorities referred to in paragraph 3 and the public referred to in	
paragraph 4 shall be given an early and effective opportunity within	
appropriate time frames to express their opinion on the draft plan or	
programme and the accompanying environmental report before the adoption	
of the plan or programme or its submission to the legislative procedure.	
3. Member States shall designate the authorities to be consulted which, by	
reason of their specific environmental responsibilities, are likely to be	
concerned by the environmental effects of implementing plans and	
programmes.	
4. Member States shall identify the public for the purposes of paragraph 2,	
including the public affected or likely to be affected by, or having an interest	
in, the decision-making subject to this Directive, including relevant non-	
governmental organisations, such as those promoting environmental	
protection and other organisations concerned.	
5. The detailed arrangements for the information and consultation of the	
authorities and the public shall be determined by the Member States.	

4 Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope

Review of other plans (Task A1)

A review of all policies, plans, and programmes with a bearing on the Plan was undertaken to help define the scope of the appraisal. Section 5 identifies documents published by the European Union, the UK Government, regional government/bodies and local bodies and sets out the key requirements and guidelines that will influence the plan.

What is baseline information?

- The term 'baseline information' refers to the existing environmental, economic and social characteristics of the area likely to be affected by the Local Plan and their likely evolution without implementation of new policies. The area likely to be affected may lie outside the local planning authority boundary and plan makers may need to obtain information from other local planning authorities. Baseline information provides the basis against which to assess the likely effects of alternative proposals in the plan.
- 4.3 Wherever possible, data should be included on historic and likely future trends, including a 'business as usual' scenario (i.e. anticipated trends in the absence of new policies being introduced). This information will enable the potential effects of the implementation of the Local Plan to be assessed in the context of existing and potential environmental, economic and social trends.

Environmental, social and economic baseline (Task A2)

Government guidelines state that sufficient information about the present and future state of an area should be collected. This allows the impact of the proposed development to be effectively predicted. The type of information required should focus on the characteristics, makeup of the area, and relate to issues to be addressed and completed for each development plan document.

4.5	Baseline data has therefore been collected in order to gain a comprehensive understanding of the following questions:
	 How good or bad is the current situation with regards to a variety of relevant matters in Merton and the three estates Do trends show it is improving or becoming worse? How big or small is the current deviation from the established targets? Are the problems reversible, or irreversible? How difficult would it be to counterbalance or correct any damage? Have there been significant direct or indirect effects over time? Are there any expected effects in the future?
4.6	The main sources of baseline information in relation to the key environmental, social and economic trends likely to be affected by plan implementation include (this is not an exclusive list): Authority Monitoring Reports (AMRs) Sustainable Community Strategies Local Plan documents Office for National Statistics http://www.ons.gov.uk/census/index Greater London Authority (GLA) publications prepared by the Data Management and Analysis Group (DMAG) Government departments e.g. Department of Work and Pensions NHS England The South London Partnership Prospectus
	Key issues (Task A3)
4.7	As part of this Scoping Report, this report has identifying sustainability issues and problems. These have informed the preparation a set of sustainability appraisal objectives for the new Local Plan.
	Developing the SA Framework (Task A4)
4.8	The identification of sustainability issues also provides useful information for the sustainability appraisal process itself. It will inform Stage B of the process where options and polices will be tested against the appraisal objectives.

The identification of sustainability issues meets the requirements of the SEA Directive to identify any existing environmental problems which are relevant to the plan or programme including those relating to any areas of a particular environmental importance. Merton's Sustainability Appraisal follows an objectives led process. All potential impacts of a plan are tested against a series of objectives for sustainable development.

Consulting consultation bodies on the scope of the SA (Task A5)

4.10	The SEA Regulations identify three organisations to act as statutory governmental environmental bodies: Environment Agency Natural England Historic England
4.11	The draft Department of Health guidance recommends that the relevant health organisations are also involved in the consultation process. This includes the following bodies:
4.12	The relevant primary care trust (PCT) with the PCT Director of Public Health being the first point of contact; Environmental Health Officers (EHOs); Health Protection Units; Public Health Observatories
4.13	There are two consultation periods for the SEA, involving the statutory consultation bodies and in the latter period, the public. The consultation periods are as follows:

- Scoping stage: The responsible authority is required to send details of the plan or programme to each consultation authority so that they may form a view on the scope, level of detail and appropriate consultation period of the Environmental Report. The statutory environmental bodies are required to give their views within five weeks from receiving notice of the consultation.
- The Environmental Report stage: The responsible authority is required to invite the statutory consultation bodies and the public to express their opinions on the Environmental Report and the plan or programme to which it relates.

5 Review of other plans (Task A1)

- The council has undertaken a comprehensive review of all its international, regional, and local plans, programmes, and sustainability objectives in order to identify the key objectives objective, indicators and targets relevance to the planning framework for the estates and the council's Sustainability Objective Framework.
- The sustainability objectives, targets, and indicators to be developed for inclusion in the SA Framework must have regard to the underlying objectives and key targets associated with the following international strategies, plans, and programmes.

Figure 5: List of other Plans reviewed

International

Kyoto Protocol to the United Nations Framework convention on climate change (1997)

Johannesburg Declaration on Sustainable development 2002

European

EU Biodiversity Strategy (1998)

EU Biodiversity Action Plan (2006)

European Landscape Convention (ratified by the UK Government in 2006)

EU Sixth Environment Action Plan (Sustainable Development Strategy) (2002)

European Spatial Development Perspective Report (1999)

EU Sustainable Development Strategy 2002 (revised 2006) (reviewed 2009)

Air Quality Framework (EU Directive 96/62/EC and daughter directives (99/30/EC), (2000/69/EC), (2002/3/EC)

Assessment of the Effects of Certain Public and Private Projects on the Environment (EIA Directive 85/337/EEC)

Assessment and Management of Environmental Noise (END Directive 2002/49/EC)

Conservation on Natural Habitats and of Wild Fauna and Flora (Directive 92/43/EEC)

Conservation of Wild Birds (Directive 79/409/EEC)

Energy Performance of Buildings (EU Directive 2002/91/EC)

Energy Efficiency (Directive 2012/27/EU)

Floods Directive (EU Directive 2007/60/EC)

Landfill Directive 1999/31/EC

Promotion of the use of Biofuels or other Renewable Fuels for Transport (EU Directive 2003/30/EC)

Renewable Energy (EU Directive 2009/28/EC)

Strategic Environmental Assessment (SEA Directive 2001/42/EC)

Urban Waste Water Directive (91/271/EEC)

Waste Framework Directive 75/442/EEC

Water Framework Directive (EU Directive 2000/60/EC)

National Regulations

National Regulations	
Air Quality Standards Regulations (2010)	These Regulations replace the Air Quality Standards Regulations 2007 implement the following Directives: Directive 2008/50/EC on ambient air quality and cleaner air for Europe (this Directive replaces Council Directive 96/62/EC on ambient air quality assessment and management, Council Directive 1999/30 EC relating to limits for sulphur dioxide, nitrogen dioxide, oxides of nitrogen, particulate matter and lead in ambient air, Council Directive 2000/69/EC relating to limit values for benzene and carbon monoxide in ambient air, Council directive 2002/3/EC relating to ozone in ambient air.) Directive 2004/107/EC relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.
Conservation of Habitat and Species Regulations, 2010	The Conservation of Habitats and Species Regulations 2010 (the "Habitats Regulations") consolidate and update the Conservation (Natural Habitats, &c.) Regulations the 1994 Regulations").
Building Regulations: England and Wales (Part L – Conservation of Fuel and Power, 2010) and (Part G Sanitation, hot water safety and water efficiency, 2010)	Part L – Conservation of fuel and power. The legal framework and Approved Documents for Part L (Conservation of fuel and power) were last revised by amendments that came into effect on 1 October 2010 and provide practical guidance on ways of complying with the energy efficiency requirements and regulation 7 of the Building Regulations 2010 (SI2010/2214)

	for England and Wales. The 2010 edition of Approved Document G - Sanitation, hot water safety and water efficiency, has been updated to incorporate amendments made to reflect any changes arising as a result of the Building Regulations 2010 and replaces the previous edition of Approved Document G - Sanitation, hot water safety and water efficiency.
Climate Change Act (2008)	The Climate Change Act aim is to managing and responding to climate change in the UK, by: setting legally binding targets, including a legally binding target of at least an 80% cut in greenhouse gas emissions by 2050 and 34% by 2020 against a 1990 baseline taking powers to help meet those targets strengthening the institutional framework enhancing the UK's ability to adapt to the impact of climate change establishing clear and regular accountability to the UK Parliament and to the devolved legislatures
Community Infrastructure Levy Regulations 2010 (and subsequent amendments	The Community Infrastructure Levy is a planning charge, introduced by the Planning Act 2008 as a tool for local authorities in England and Wales to help deliver infrastructure to support the development of their area.
Deregulation Act 2015	The Deregulation Act provides for the removal or reduction of burdens on businesses, civil society, individuals, public sector bodies and the taxpayer. As far as is practicable all necessary technical housing standards should now be included in the main building regulations rather than within development plans. The act provides for an amendment to be made to the Planning and Energy Act 2008. Section 1(1)(c) of that Act provides that local planning authorities may include in their plans requirements that development in their area meets higher standards of energy

	efficiency than are required by building regulations. The government policy meanwhile is that new dwellings meet a zero net carbon emissions standard from 2016. Building regulations should also provide for optional requirements. Local planning authorities will be able where circumstances justify it, to make it a condition of planning permission for developments that they comply with one or more such optional requirements, which will then apply to the development as building regulations requirements, and be inspected and enforced as such.
Energy Act 2008	The Energy Act 2008 updates energy legislation to: // reflect the availability of new technologies and emerging renewable technologies // correspond with the UK's changing requirements for secure energy supply // protect our environment and the tax payer as the energy market changes
Environmental Assessment of Plans and Programmes regulations 2004	Provides the regulations for the implementation of the Strategic Environmental Assessment Directive (EU/2001/42/EC) for certain plans and programmes that are likely to have significant environmental impacts.
Environmental Noise (England) Regulations 2006 (as amended)	The regulations transpose the EU Directive 2002/49/EC that relates to the assessment and management of environmental noise.
Flood and Water Management Act 2010	The Act updates legislation to ensure; better protection from flooding, manage water more sustainably, improve public services and secure water resources during periods of drought. The Flood and Water Management Act gives local authorities new

	responsibilities. There now classed as lead local flood authorities (LLFAs) who have responsibilities for managing local flood risk in their area. The responsibilities of a LLFA include:) prepare and maintain a strategy for local flood risk management in their areas, co-ordinating views and activity with other local bodies and communities through public consultation and scrutiny, and delivery planning) maintain a register of assets – these are physical features that have a significant effect on flooding in their area) investigate significant local flooding incidents and publish the results of such investigations) establish SuDS approval bodies (SABs) that will be responsible for the approval of design, build and adoption of SuDS) issue consents for altering, removing or replacing certain structures or features on ordinary watercourses) play a lead role in emergency planning and recovery after a flood event
Flood Risk and Coastal Change, 2014	Advises how to take account of and address the risks associated with flooding and coastal change in the planning process.
Flood Risk Assessments: Climate Change Allowances, 2017	The Flood Risk Assessments: Climate Change Allowances advice updates previous climate change allowances to support NPPF. The Environment Agency (EA) has produced it as the government's expert on flood risk.

Growth and Infrastructure Act 2013	The Act sets out reforms intended to reduce red tape, that the government considers hampers business investment, new infrastructure and job creation.
Housing and Planning Act 2016	Through this Act, the Government aims to take forward proposals to build more homes that people can afford, give more people the chance to own their own home and ensure the way housing is managed is improved. The Act seeks to achieve this in part, by implementing reforms that will make sure that the planning system does not add any unnecessary obstacles to the delivery of new homes. The Act includes provision for the delivery of Starter Homes and Social Housing. The Act also provides for "permission in principle" ("PIP") for housing led development, which will provide developers with greater certainty of consent at an earlier stage in the development cycle.
Local Government White Paper: Strong and Prosperous Communities (2009)	The aim of this White Paper is to give local people and local communities more influence and power to improve their lives. It is about creating strong, prosperous communities and delivering better public services through a rebalancing of the relationship between central government, local government and local people.
Natural Environment and Rural Communities Act (2006)	The Natural Environment and Rural Communities Act is designed to help achieve a rich and diverse natural environment and thriving rural communities through modernised and simplified arrangements for delivering Government policy. The Act is accompanied by a set of explanatory notes, a Regulatory Impact Assessment and a policy statement.

Planning and Compulsory Purchase Act (2004)	The Act received Royal Assent on 13 May 2004 and the provisions of the Act were introduced through a series of Commencement Orders and Regulations. The Act strengthened the focus on sustainability, transparency, flexibility and speed. The aim of the Act is to give effect to the Government's policy on the reform of the planning system, the principal features of which are set out in the policy statement Sustainable communities: Delivering through planning which was published on 23 July 2002.
Planning and Energy Act (2008)	This Act allows local councils to set targets in their areas for on-site renewable energy, on site low carbon electricity and energy efficiency standards in addition to national requirements. It requires developers to source at least 10% of any new building's energy from renewable sources.
Planning Act (2008)	The Planning Act 2008 was granted Royal Assent on 26 November 2008. The Act introduced a new stream lined system for decisions on applications to build nationally significant infrastructure projects (NSIPs) in England and Wales, alongside further reforms to the town and country planning system and the introduction of a Community Infrastructure Levy (CIL).
Localism Act (2011)	The Localism Act takes power from central government and hands it back to local authorities and communities giving them the freedom and flexibility to achieve their own ambitions. There are five key measures in the Localism act:

Community Rights Neighbourhood Planning Housing Empowering cities and other local areas General power of competence Different parts of the Act will come into effect at different times. National Planning Policy Framework The National Planning Policy Framework (NPPF), sets out the (2012) and nation Planning Practice Government's planning policies for England and how these should be applied. The NPPF sets out the Government's Guidance (2012) requirements for the planning system only to the extent that it is Draft National Planning Policy Framework relevant, proportionate and necessary to do so. At the heart of the (2018) and nation Planning Practice NPPF is a presumption in favour of sustainable development. For Guidance (2018) plan making this means that: local planning authorities should positively seek opportunities to meet the development needs of their area; Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless: any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole or specific policies in this Framework indicate development should be restricted For decision taking this means: approving development proposals that accord with the development plan without delay; and where the development plan is absent, silent or relevant policies are out of date, granting permission unless:

	 any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole or specific policies in this Framework indicate development should be restricted
Neighbourhood Planning Regulations (2012)	The Regulations set out the procedure for the designation of neighbourhood areas, neighbourhood forums and for the preparation of neighbourhood development plans and neighbourhood development orders (including community right to build orders).
Sustainable Communities Act 2007 (Amended 2010) and Sustainable Communities Regulations 2012	The Sustainable Communities Act 2007 provides an opportunity for communities to identify legislative barriers that prevent them from improving the sustainability of their local areas and discuss them with their local authorities. If the barrier needs Government action to remove it, local authorities can ask government to remove it.
Town and Country Planning Act (1990)	The Town and Country Planning Act 1990 is an act of the British Parliament regulating the development of land in England and Wales
The Town and Country Planning (Environmental Impact Assessment) (Amendment) (England) Regulations 2008	These Regulations amend the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1991 so that they apply to applications for subsequent approval of matters under conditions attached to planning permissions.

The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999	These regulations outline the procedure for considering environmental impact when deterring planning permission applications.
The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 And Amendment 2015	These Regulations replace the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (SI No. 293) ("the 1999 Regulations") and subsequent amending instruments. The Town and Country Planning (Environmental Impact Assessment) (Mineral Permissions and Amendment) (England) Regulations 2008 remain in force. These Regulations, except for the provisions relating to projects serving national defence purposes, extend to England only. The 1999 Regulations remain in force for Wales. These regulations provide a consolidation of the 1999 regulations to reflect amendments to the EIA directive and recent case law.
The Town and Country Planning (Environmental Assessment and Permitted Development) Regulations 1995	These Regulations are concerned with the further implementation in England and Wales of Council Directive 85/337/EEC.
The Town and Country Planning (General Development Procedure) (Amendment) (England) Order 2010	This order amends the GDPO 1995 in relation to: Design and access statements Publicity of planning applications Time limits for lodging certain planning appeals Provisions to include on the planning register applications for non-material amendments

The Town and Country Planning (General Permitted Development) (Amendment) (England) Order 2012	The Town and Country Planning (General Permitted Development) (Amendment) (England) Order 2012 amends the Town and Country Planning (General Permitted Development) Order 1995 ("GPDO") by: adding a new Part 43 to Schedule 2 to introduce permitted development rights for solar panels, ground and water source heat pumps, and flues forming part of biomass and combined heat and power systems installed on non-domestic premises inserting new paragraphs into Parts 6 and 7 of Schedule 2 to clarify that permitted development rights can apply under those Parts to structures to house biomass boilers, anaerobic digestion systems and associated waste and fuel stores, and hydro turbines installed on agricultural and forestry units, and amending paragraph J of Part 40 of Schedule 2 (interpretation of Part 40) to delete the words "product and installation" from the definition of "MCS Planning Standards".
The Town and Country Planning (Local Planning) (England) Regulations 2012	The Regulations (a) consolidate the existing Town and Country Planning (Local Development) (England) Regulations 2004 and the amendments made to them; and (b) make new provision and amendments to take account of the changes made by the Localism Act2011.
The Town and Country Planning (Use Classes) (Amendment) (England) Order 2010	This amendment introduces a definition of houses in multiple, occupation into the Use Classes Order.

The Water Resources Act 1991	This Act aims to prevent and minimise pollution of water. The
(Amendment) E&W Regulations 2009	Environment Agency are responsible for ensure the Act is enforced. Under the act it is an offence to cause or knowingly permit any poisonous, noxious or polluting material, or any solid waste to enter any controlled water. Silt and soil from eroded areas are included in the definition of polluting material. If eroded soil is found to be polluting a water body or watercourse, the Environment Agency may prevent or clear up the pollution, and recover the damages from the landowner or responsible person.
The Water Act 2003	The four broad aims of the Act are: J the sustainable use of water resources; J strengthening the voice of consumers; J a measured increase in competition; and J the promotion of water conservation.
National: strategies /plans/ publications	
Air Quality Strategy DEFRA 2007	The strategy sets out air quality objectives and policy options to further improve air quality in the UK. As well as direct benefits to public health, these options are intended to provide important benefits to quality of life and help to protect our environment.
Air Pollution: Action in a changing Climate 2010	This document does not replace the current air quality strategy but accounts for the rapid development of climate change policy since the strategy was published in 2007.
Biodiversity – The UK Action Plan (1994)	The Action Plan is the UK Government's response to the Convention on Biological Diversity (CBD) signed in 1992. It describes the UK's biological resources and commits a detailed plan for the protection of these resources. The Government published the first lists of Priority Species and Habitats in 1995

	as part of the UK Biodiversity Action Plan (UK BAP), which included over 300 species.
Natural England's – England Biodiversity (2002)	England Biodiversity Strategy was published in 2002. It brings together England's key contributions to achieving the 2010 target to halt biodiversity loss. It also seeks to make biodiversity part of mainstream thinking and emphasises that healthy, thriving and diverse ecosystems are essential to everybody's quality of life and wellbeing. The Strategy has five themes: Protecting the best wildlife sites Promoting the recovery of declining species and habitats Embedding biodiversity in all sectors of policy and decision making Enthusing people Developing the evidence base. An important aim of the strategy is to deliver the UK Biodiversity Action Plan in England, and a measure of success of conserving England's biodiversity is how the status of priority species and habitats is changing.
Biodiversity 2020: A strategy for England's wildlife and ecosystems 2011	Provides a comprehensive picture of how the international and EU commitments are being implemented. It sets out the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea. The strategy aims to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people.
Securing the Future: UK Sustainable Development Strategy (2005)	This sets out the national framework for Sustainable Development based on 4 central aims: J social progress which recognises the needs of everyone J effective protection of the environment J prudent use of natural resources

	 maintenance of high and stable levels of economic growth and employment
	The strategy sets five guiding principles to achieve sustainable development: living within environmental limits ensuring a strong, healthy and just society achieving a sustainable economy promoting good governance using sound science responsibly
Sustainable Construction Strategy (2008)	This Strategy is aimed at providing clarity around the existing policy framework and the future direction of Government policy. It aims to realise the shared vision of sustainable construction by:
	 Providing clarity to business on the Government's position by bringing together diverse regulations and initiatives relating to sustainability Setting and committing to higher standards to help achieve sustainability in specific areas Making specific commitments by industry and Government to
UK Low Carbon Transition Plan (2009)	take the sustainable construction agenda forward The low carbon transition plan sets out how the government is to meet its binding carbon budget of an 18% cut in emissions on 2008 levels by 2020 (34% on 1990 levels). It also allocated individual carbon budgets for the major UK government departments, which are expected to produce their own plans.

Carbon Plan 2011	The Carbon Plan was published in December 2011 and sets out the Government's plans for achieving the emissions reductions committed to in the first four carbon budgets, on a pathway consistent with meeting the 2050 target. This publication brings together the Government's strategy to curb greenhouse gas emissions and deliver our climate change targets, as well as the updated version of our actions and milestones for the next five years; replacing the draft Carbon Plan published in March 2011. Part 1, 2 and 3 of the report, Annex A and Annex B set out the Government's strategy for delivering carbon budgets and fulfil the legal obligation to report on what the UK is doing to ensure it meets carbon budgets set in law. Annex C of this report sets out, department by department, actions and deadlines for the next five years.
Energy Efficiency Strategy: The Energy Efficiency Opportunity in the UK (DECC 2012)	This is an Energy Efficiency Strategy to maximise existing policy and realise the wider energy efficiency potential that is available in the UK economy.

Estate Regeneration National Strategy -
Good Practice Guide Part 1, DCLG
December 2016

The estate regeneration good practice guide sets out key considerations for schemes at the early stages and a model process for successful regeneration. The guide is for all stakeholders in estate regeneration schemes for example landowners, residents, local authority officers and members, consultants, developers, public service providers, businesses and charities. It should be read in conjunction with the other components of the estate regeneration national strategy, including guidance on resident engagement and protection, finance and delivery.

The guide sets out the principal activities, considerations, key participants and source material for typical regeneration projects at the preparation, planning or delivery stages of projects. This guidance does not intend to set out a list of mandatory requirements for estate regeneration schemes. It is intended as a general good practice guide for all stakeholders to consider in relation to the characteristics and challenges of each individual scheme.

Laying the Foundations: A Housing Strategy for England (2011)

A radical new strategy to reignite the housing market and get the nation building again was launched on 21 November by the Prime Minister. The Housing Strategy sets out a package of reforms to: get the housing market moving again; lay the foundations for a more responsive, effective and stable housing market in the future; support choice and quality for tenants; improve environmental standards and design quality.

The new strategy addresses concerns across the housing

	market making it easier to secure mortgages on new homes, improving fairness in social housing and ensuring homes that have been left empty for years are lived in once again.
National Flood and Coastal Erosion Risk Management Strategy for England, 2011	This document contains the following information: Understanding the risks, empowering communities, building resilience: the national flood and coastal erosion risk management strategy for England
Water Strategy Future Water: The Government's Water Strategy for England (2008)	The overarching aim of the Water Strategy is to improve standards of service and quality, through sustainable water management, whilst achieving a balance between environmental impacts, water quality of surface and ground waters, supply and demand, and social and economic effects. The intermediate outcomes are: • No deterioration in water quality in the environment, aiming for improvement to good ecological status by 2015, and improved biodiversity and ecology with increased value from sustainable recreation • Climate change mitigation and adaptation • Sustainable use of water resources with no essential supply interruptions during drought • High levels of drinking water quality
Waste Strategy (2007)	Fair, affordable and cost-reflective charges. This new strategy builds on Waste Strategy 2000 (WS2000) and
Waste Strategy (2007)	

	addressing the key challenges for the future through additional steps. The Government's key objectives are to: decouple waste growth (in all sectors) from economic growth and put more emphasis on waste prevention and re-use; meet and exceed the Landfill Directive diversion targets for biodegradable municipal waste in 2010, 2013 and 2020; increase diversion from landfill of non-municipal waste and secure better integration of treatment for municipal and non-municipal waste; secure the investment in infrastructure needed to divert waste from landfill and for the management of hazardous waste get the most environmental benefit from that investment, through increased recycling of resources and recovery of energy from residual waste using a mix of technologies
UK Sustainable Procurement Action Plan (2007)	The Government launched a package of actions to deliver the step change needed to ensure that supply chains and public services will be increasingly low carbon, low waste and water efficient, respect biodiversity and deliver wider sustainable development goals. The Action Plan puts in place clear lines of accountabilities and reporting, and develops plans to raise the standards and status of procurement practice in Government, which will strengthen delivery of these targets.

Noise Policy Statement for England (DEFRA 2010)	This statement sets out the long term vision of Government noise policy, which is to promote good health and a good quality of life through the management of noise within the context of Government policy on sustainable development. The policy seeks to make explicit the implicit underlying principles and aims regarding noise management and control that are to be found in existing policy documents, legislation and guidance.
Healthy lives, healthy people: our strategy for public health in England 2010 and update 2011	The strategy sets out a bold vision for a reformed public health system in England including: Local authorities to take new responsibilities for public health Local authorities to be supported by a new integrated public health service such as Public Health England A stronger focus to be placed on outcomes across the system Public health as a clear priority and a core part of business A commitment to reduce health inequalities.
DEFRA Sustainable Drainage Systems Non-Statutory Technical Standards for Sustainable Drainage Systems 2015	This document sets out non-statutory technical standards for sustainable drainage systems. They should be used in conjunction with the National Planning Policy Framework and Planning Practice Guidance.

National Guidance and other Reference Documents

Building Research Establishment Environmental Assessment Method (BREEAM)

Environment Agency: Creating a better place. Our corporate strategy (2010-2015)

Environment Agency: Climate Change, adaptin	g for tomorrow (2009)	
Environment Agency: Water for people and the environment. Water resources strategy for England and Wales (2009)		
English Heritage Conservation Principles: for the	ne sustainable management of the historic environment (2008)	
English Heritage, Guidance on Environmental Assessment, Sustainability Appraisal and the Historic Environment (2010)		
English Indices of Deprivation (2015)		
National Heritage Protection Plan (2015-18)		
Guidance on Tall Buildings CABE and English	Heritage (2007)	
Model Procedures for the Management of Cont	aminated Land-Environment Agency.	
Regional: Plans/strategies		
Air Quality		
Clearing London's Air: Air Quality Strategy (2010)	The strategy sets out a framework for improving London's air quality and measures aimed at reducing emissions from transport, homes, offices and new developments, as well as raising awareness of air quality issues.	
The Control of Dust and emission during construction and demolition (2014) SPG	The aim of this supplementary planning guidance (SPG) is to reduce emissions of dust, PM ₁₀ and PM _{2.5} from construction and demolition activities in London. It also aims to control nitrogen oxides (NOx) from these same activities by introducing an Ultra-Low Emissions Zone (ULEZ) for non-road mobile machinery.	
Accessibility and Equity		
Equal Life Chances for All framework (2014)	The Equal Life Chances for All framework 2014 highlights the Mayor's commitment to tackling inequality; improving life chances and removing barriers that prevent people from reaching their full potential.	
Accessible London: Achieving an Inclusive Environment. Mayor's Supplementary Planning Guidance (2014)	This provides detailed guidance on the policies contained in the London Plan to make places usable by everyone especially disabled people.	

Planning for Equality and Diversity in London. Mayor's Supplementary Planning Guidance (2007)	This SPG provides guidance to London boroughs, partners and developers on the implementation of policies in the London Plan, which relate to equalities issues and addressing the needs of London's diverse communities.
Climate Change and Energy	
Climate Change Mitigation and Energy Strategy (2011)	This strategy focuses on reducing CO2 emissions to mitigate climate change, securing a low carbon energy supply for London, and moving London to a thriving low carbon capital. It forms a central part of the Mayor's goal of retrofitting London. The Mayor's activity to achieve this is well underway. His programmes are already making real cuts in CO2 emissions, improving quality of life for Londoners, and creating economic opportunities for the capital.
Managing risks and increasing resilience: Draft Climate Change Adaptation Strategy for London (2010)	The Mayor's Climate Change Adaptation Strategy: identifies who and what is most at risk today analyses how climate change will change the risk of flood, drought and heat-wave through the century describes what action is needed to manage the changes and who is responsible The key actions proposed in the strategy are: To improve our understanding and management of surface water flood risk An urban greening programme to increase the quality and quantity of green space and vegetation in London which will buffer London from floods and hot weather To retro fit up to 1.2m homes by 2015 to improve the water and energy efficiency of London homes

Culture	
Cultural Strategy: Cultural Metropolis (2010)	The Mayor's Cultural Strategy sets out his vision, priorities and recommendations for how to strengthen the cultural life of Londoners across the capital. The strategy recognises the significance of the cultural and creative sectors in making London a successful world city, and puts forward a case for its continued support and investment – particularly in the run up to the 2012 Olympics and the opportunity it presents for London to undertake a step change in cultural activity and participation.
Economy and skills	
Mayors Economic Development Strategy (2010)	The Mayor's vision is for London to be the best big city in the world. The Strategy sets out this vision with respect to the London economy, and how it can be realised. The Mayor's ambitions are for London to be the World Capital of Business, and to have the most competitive business environment in the world; to be one of the world's leading low carbon capitals, for all Londoners to share in London's economic success and for London to maximise the benefits of the 2012 Olympic and Paralympic games.
Draft Mayor's Economic Development Strategy for London (2017)	Sets out the Mayor's plans to grow London's economy, support businesses, boost innovation and create a city that works for all. The draft strategy has three main goals: Opening up opportunities: everyone should be able to benefit from all our city offers Growth: ensuring our economy will continue to thrive and is open to business Innovation: to make London a world leader in technology and a hub of new ideas and creativity

Skills Strategy (2018)	The strategy outlines plans to create a post 16 technical and vocational education and skills system that meets the needs of Londoners and businesses. It also calls on London's businesses, of all sizes and sectors, to outline what they need and what they can contribute to build the workforce of the future.
A vision for a 24 hour city (2017)	This vision sets out the Mayor's plan to turn London into a leading 24 hour global city, it focuses on building a night-time culture which: promotes culture and leisure for all ages and interests increases opening hours ensures safety for residents, visitors and night time workers works closely with boroughs and the police to create a balanced and sustainable night time offer These principles have been developed through conversations with businesses, the Night Time Economy Borough Champions, the police and many others. London at night will: Be a global leader. Provide vibrant opportunities for all Londoners, regardless of age, disability, gender, gender identity, race, religion, sexual orientation or means. Promote all forms of cultural, leisure, retail and service activity. Promote the safety and wellbeing of residents, workers and visitors.

Promote welcoming and accessible nightlife. Promote and protect investment, activity and entrepreneurship. Promote domestic and international visits to London. Be strategically located across London to promote opportunity and minimise impact. Become a 24-hour city that supports flexible lifestyles. Take account of future global and domestic trends in leisure, migration, technology, employment and economics. Environment London Environment Strategy (2017) The strategy sets out the Mayor's approach to tackling some of the environmental challenges facing London. Toxic air, noise pollution, the threat to green spaces, adverse effect of climate change which all pose a major risk to health and wellbeing of Londoners. This is the first strategy to bring together approaches to every aspect of London's environment. It is divided into the following areas:

- Air quality
- · Green infrastructure
- Climate change mitigation and energy
- Waste
- Adapting to climate change
- Ambient noise

Flood Risk	
Thames Region Catchment Flood Management Plan (2009)	This plan presents what the Environment Agency considers the most sustainable direction for the management of fluvial flood risk within the region for the next 50 to 100 years. The plan is based on extensive research into the catchment characteristics of the region and the options available for managing the risk to people, properties and the environment. The likely impacts of climate change and the plans for future development are also taken into account.
Regional Flood Risk Appraisal (2009)	The Mayor published the Regional Flood Risk Appraisal (RFRA) in October 2009. The RFRA examines the nature and implication of flood risk in London and how the risk should be managed. The RFRA contains 19 recommendations, involving or lead by a range of organisations. Progress against the recommendations will be monitored annually in the London Plan Annual Monitoring Report.
Mayor of London: Regional Flood Risk Appraisal (2014)	The Regional Flood Risk Appraisal (RFRA) provides an overview of all sources of flooding in London and addresses its probability and consequences.
The Thames Estuary 2100 Plan (2012)	Recommends how to manage tidal flood risk to the end of the century and beyond. The plan sets out how 1.25 million people and £200 billion worth of property will continue to be protected from tidal flood risk.
Lower Thames Flood Risk Management Strategy (2010)	The Lower Thames Flood Risk Management Strategy (LTFRMS) proposes measures to reduce the risk of flooding to the 15,000 properties which are currently at risk from a 1% flood

	event in the area from Datchet to Teddington. These measures include the construction of three flood diversion channels, the widening of Desborough Cut and improvements to Sunbury and Molesey Weirs and Teddington Lock. It also includes community based measures for improving resistance and resilience to flooding for smaller groups of properties and improving mapping information for emergency evacuation plans.
Thames River Basin Management Plan (2009)	The EU Water Framework Directive requires the Environment Agency to prepare and publish 10 River Basin Management Plans (RBMP) to promote the concept of sustainable water management. The aims of the plan is: To safeguard the sustainable use of water To protect and restore the status of aquatic ecosystems To improve aquatic environments by the reduction of hazardous substances To reduce groundwater pollution To help mitigate the effects of flood and droughts
Health	
Better Health For All Londoners: London health inequalities strategy (2018)	The strategy sets out the Mayor's framework to reduce health inequalities in the capital. The strategy has five aims: Healthy children: every child in London child to have a healthy start Healthy minds: for all Londoners to share in a city with the best mental health in the world. Healthy places: for all Londoners to benefit from a society, environment and economy that promotes good mental and

	physical health Healthy communities: for London's diverse communities to be healthy and thriving. Communities that are better connected and engaged are more socially integrated. They are also healthier. Healthy habits: to ensure that the healthy choice is the easy choice for all Londoners. The combination of smoking, excessive drinking, physical inactivity and an unhealthy die is too common in some communities, leading to health problems
NHS London: Strategic Plan (2008-13)	A strategic plan that sets out an ambitious programme of work to deliver high-quality, value for money services.
Heritage	
Strategic Environmental Assessment, Sustainability Appraisal and the Historic Environment – English Heritage (2010)	The guidance focuses on SEA/SA for development plans, including neighbourhood plans; it is equally applicable to the preparation of SEA/SAs for other types of documents such as Local Transport Plans and Water Resource Management Plans.
English Heritage's Heritage at Risk Register London (2011)	Identifies listed buildings at risk from neglect, decay, under use or redundancy in London.
Housing	
London Housing Strategy (2014)	The overriding aims of this strategy are to increase the supply of housing of all tenures and to ensure that these homes better support London's continued economic success. The strategy is not just about supply; policies range from improving the existing

	stock to tackling rough sleeping – but supply is at the heart of it, underpinning each of its five key priorities
London Housing Strategy (2018)	The aim of the strategy is to address the housing shortage through an intensive use of London's available land, focusing on more genuinely affordable housing and providing help now for people feeling the effects of the housing crisis - from private renters to rough sleepers.
	This Strategy has five key areas:
	 Building more homes for Londoners Delivering genuinely affordable homes High quality homes and inclusive neighbourhoods A fairer deal for private renters and leaseholders Tackling homelessness and helping rough sleepers
GLA Housing Design Guide (2010)	The new 'interim edition' of the London Housing Design Guide sets out the Mayor of London's aspirations for the design of new housing in the capital. The Mayor is committed not just to delivering more homes in London, but also to improving the quality of our homes. The London Development Agency has published the new London Housing Design Guide, which sets a new benchmark for housing design in London. All housing built on London Development Agency land is expected to meet these standards. The standards will also start to be applied to housing schemes applying for funding from the London Homes and Communities Agency from April 2011.

Housing Mayor's Supplementary Planning Guidance (2012)	This draft document sets out proposed guidance to supplement the housing policies in the 2011 London Plan (LP). The SPG is informed by the Government's draft National Planning Policy Framework and by its new Housing Strategy for England.
Affordable Housing and Viability SPG (2017)	The draft SPG provides guidance to ensure that policy is as effective as possible. It does not and cannot introduce new policy. The SPG's main aim is to speed up planning decisions and increase the amount of affordable housing delivered through the planning system. Importantly, it will help embed the requirement for affordable housing into land values and make the viability process more consistent and transparent, as well as speeding up the planning process for those scheme which are delivering more affordable homes. The guidance set out the preferred approach for all schemes of ten units or more.
Housing Standards (2016)	Minor alterations to the London Plan on Housing Quality and Design, Housing Choice, Sustainable Design and Construction, Water Use and Supplies Policy and Lifetime Neighbourhoods Policy

Homes for Londoners: Good Practice Guide to Estate Regeneration (2018)	The guidance is aimed at local authorities and housing associations, covering three key issues: • Aims and objectives of estate regeneration; • Consultation and engagement with residents; • A fair deal for tenants and leaseholders. Once adopted, the Guide is intended to reassure Londoners that they will be given real opportunities to shape estate regeneration, that engagement and consultation will be meaningful, and that offers of rehousing and compensation will meet guaranteed standards. The principles set out in this draft of the Guide should be read in conjunction with a number of other documents that address related issues in estate regeneration projects, covering everything from urban design principles to methods of procurement, as well as with statutory housing and planning policy documents.
Infrastructure	
Social Infrastructure SPG (2015)	This document contains guidance to support London Plan Policy 3.16 on the Protection and Enhancement of Social Infrastructure, as well as policies 3.17 Health and Social Care Facilities, 3.18 Education Facilities and 3.19 Sports Facilities. It particularly focuses on those elements of social infrastructure that face the biggest strategic challenges - specifically health, education, sport, faith and burials.
Central London Infrastructure Study (2009)	The study aims to provide a strategic understanding of the implications of growth for the whole of Central London, with an indication of how growth, and therefore demand for

infrastructure, is distributed across the study area. This analysis allows Central London Forward to build a robust case for additional infrastructure investment for Central London to achieve sustainable growth up to 2026. In particular, as well as offering local authority level information and analysis, the report provides evidence of sub-regional issues and opportunities, encouraging joint solutions wherever appropriate. This study also identifies existing gaps and shortfalls in infrastructure provision.

London Plan

London Plan (2011)

Further Alterations to the London Plan (FALP) (2016)

Draft London (2018)

Strategic planning in London is the shared responsibility of the Mayor of London, 32 London boroughs and the Corporation of the City of London. Under the legislation establishing the Greater London Authority (GLA), the Mayor has to produce a spatial development strategy (SDS) – which has become known as 'the London Plan' – and to keep it under review.

The London Plan is:

- the overall strategic plan for London, setting out an integrated economic, environmental, transport and social framework for the development of London over the next 20–25 years
- the document that brings together the geographic and locational (although not site specific) aspects of the Mayor's other strategies – including those dealing with:
 - Transport

- Economic Development
- Housing
- Culture
- a range of social issues such as children and young people, health inequalities and food
- a range of environmental issues such as climate change (adaptation and mitigation), air quality, noise and waste
- the framework for the development and use of land in London, linking in improvements to infrastructure (especially transport); setting out proposals for implementation, coordination and resourcing; and helping to ensure joined up policy delivery by the GLA Group of organisations (including Transport for London)
- the strategic, London-wide policy context within which boroughs should set their detailed local planning policies
- the policy framework for the Mayor's own decisions on the strategic planning applications referred to the Mayor
- an essential part of achieving sustainable development, a healthy economy and a more inclusive society in London

Noise

London Agglomeration Noise Action Plan (2010)

The purpose of the Noise Action Plan is to assist in the management of environmental noise and its effects, including noise reduction if necessary, in the context of government policy

Sounder City: The Mayors Ambient Noise Strategy (2004)	on sustainable development. Noise Action Plans are based on the results of the strategic noise maps published in 2008. The aim of the Mayor's ambient noise strategy is a practical one – to minimise the adverse impacts of noise on people living and working in, and visiting London using the best available practices and technology within a sustainable development framework. Three key issues are: 1. Securing good noise reducing road surfaces 2. Securing a night aircraft ban across London 3. Reducing noise through better planning and design of new housing
Open Space, Biodiversity and environment	
London's Natural Signatures: The London Landscape Framework (Natural England 2011)	The London Landscape Framework aims to support but also go beyond existing green space policy. The Natural Signatures are a means of encapsulating and evoking the key natural characteristics of the Natural Landscape Areas.
All London Green Grid March (2012)	The All London Green Grid takes the principles of the East London Green Grid and applies them across London. J The concept of a "green grid" – an integrated network of green and open spaces together with the Blue Ribbon Network of rivers and waterways – is at the centre of the London Plan's approach to the provision, enhancement and management of green infrastructure (Policy 2.18). This network of spaces functions best when designed and managed as an interdependent 'grid'.

Shaping Neighbourhoods: Play and	The ALGG SPG aims to promote the concept of green infrastructure, and increase its delivery by boroughs, developers, and communities, by describing and advocating an approach to the design and management of green and open spaces to deliver hitherto unrealised benefits. These benefits include sustainable travel, flood management, healthy living, and creating distinctive destinations; and the economic and social uplift these support. The guidance supports the implementation of the London Plan
Informal Recreation SPG (2012)	Policy 3.6 on 'Children and Young People's Play and Informal Recreation Facilities,' and other policies on shaping neighbourhoods (Chapter 7 of the London Plan), in particular Policy 7.1 on Lifetime Neighbourhoods.
Connecting with London's Nature. The Mayor's Biodiversity Strategy (2002)	The document details the Mayor's vision for protecting and conserving London's natural open spaces. It seeks to ensure that there is no overall loss of wildlife habitats in London, and that open spaces are created and made accessible, so that all Londoners are within walking distance of a quality natural space. The strategy is an important step in establishing a London-wide framework for maintaining London's diversity of wildlife.
Sustainability	
Sustainable Design and Construction SPG, (2014)	This SPG provides guidance on the implementation of London Plan policy 5.3 – Sustainable Design and Construction, as well as a range of policies, primarily in Chapters 5 and 7 that deal with matters relating to environmental sustainability.

Transport	
Mayors Transport Strategy (2018)	The document sets out the Mayor's policies and proposals to reshape transport in London over the next two decades
	Three key themes are at the heart of the strategy.
	 Healthy Streets and healthy people: Creating streets and street networks that encourage walking, cycling and public transport use will reduce car dependency and the health problems it creates. A good public transport experience: Public transport is the most efficient way for people to travel over distances that are too long to walk or cycle and a shift from private car to public transport could dramatically reduce the number of vehicles on London's streets. New homes and jobs: Planning the city around walking, cycling and public transport use will unlock growth in new areas and ensure that London grows in a way that benefits everyone.
Mayors Transport Strategy (2010)	The Mayor's Transport Strategy is a statutory document, developed alongside the London Plan and Economic Development Strategy as part of a strategic policy framework to support and shape the economic and social development of London over the next 20 years. It sets out the Mayor's transport vision and describes how Transport for London (TfL) and its partners, including the London boroughs, will deliver that vision.

Transport for London: Transport Assessment Best Practice Guidance (2010)	The purpose of this document is to provide high level guidance to improve the process for TfL and its Land Use Planning Team (LUP) and it does not replace borough guidance on transport assessments. The guidance is relevant to developments that are deemed to be strategically important and which are referred to the Mayor of London under the Town and Country Planning (Mayor of London) Order 2008.
Waste	
Mayors Draft Replacement Municipal Waste Management Strategy (2010)	The Strategy is made up of six key policy chapters, outlining where the Mayor thinks he can make most difference. The six overarching policies are: Jinform producers and consumers of the value of reducing, reusing and recycling Provide a greenhouse gas standard for municipal waste management activities to reduce their impact on climate change Capture the economic benefits of waste management Achieve 50 per cent municipal waste recycling or composting performance (including anaerobic digestion) by 2020 and 60 per cent by 2031 Catalyse municipal waste infrastructure in London, particularly low-carbon technologies Achieve a high level of street cleanliness.
Water	

Securing London's Water Future (2011)	This is the first water strategy for London and provides a complete picture of the capital's water needs. The strategy calls for organisations involved in the city's water management to: Jinvest in a water management and sewerage system to ensure London has the water services fit for a world class city and create jobs J support and encourage Londoners to take practical action to save water, save energy and save on their utility bills (a standard package of water saving measures can save a household around 35,000 litres of water per year and £90 off their bills) J realise the potential of London's sewage as a clean energy resource to help reduce greenhouse gas emissions and improve energy security J work in partnership with the Mayor, boroughs and communities to seek and develop opportunities to manage flood risk through enhancing London's green spaces At the heart of the strategy is a six-point plan to reduce London's water demand. At a time of decreasing supply and increasing demand for water, it makes sense to use the water we have more wisely. The strategy promotes increasing water efficiency and reducing water wastage to balance supply and demand for water, safeguard the environment and help tackle water affordability problems.
Taking Care of Water: Our Plan for the next 25 years (Thames Water Utilities 2007)	Taking care of water describes a long-term strategy to address a series of issues. It is built around the four main themes that have emerged from public consultation: delivering for customers;

	planning for a sustainable future; delivering efficiently; and providing affordable services. The document set out the things that are needed to meet the challenges of the future. It also set out the costs of providing those services and the likely impact on bills.
Water Resources Management Plan (Thames Water Utilities 2010-2035)	Sets out how demand for water is balanced against the supply over the next 25-year period.
Our Plans for Water (Thames Water Utilities 2010-2015)	A five-year Plan, which sets out proposals to maintain and improve services during the period 2010 to 2015.

Local: Plans and strategies

Community

Community Plan 2014

Merton's Cultural Strategy - A Better Future for All 2007-10

Economy

Employment Land Study 2010

Merton's Economic Development Strategy 2010 and Refresh 2012

Merton's Employment and Skills Action Plan 2013-14

Education

Site options for a new Secondary School - Capita Symonds 2013

Energy and Climate Change

Climate Change Strategy 2014- 2017

Carbon Assessment of Domestic Housing in London Borough of Merton 2010

Merton Climate Change Research: Town Centre Morden: CHP Plant Option Appraisal 2010

Merton Climate Change: Renewable Energy Resources in Merton - A Preliminary Assessment 2009

Environment

Nature Reserve Management Plans (13 in total) 1997-2007

Thames Landscape Strategy 2012

Flood Risk

(Joint) Strategic Flood Risk Assessment (Level 1 and 2) (2015 and 2017) (London Boroughs of Wandsworth, Merton, Sutton and Croydon)

Local Flood Risk Management Strategy 2014

Preliminary flood Risk Assessment 2011

Health

Annual Public Health Report 2018

Joint Strategic Needs Assessment year tbc

The Health Needs Assessment: East Merton 2014

Pharmaceutical Needs Assessment

Childhood Obesity Action Plan 2017

Food Poverty Plan 2018

Merton CCG Dementia Strategy (TBC) - (Five year period) tbc

Health in All Policies (HiAP) (emerging)

Autism Strategy (emerging)

Dementia Strategy (emerging)

Heritage and Archaeology

Merton's Conservation Area Character Assessments

Borough Character Study 2014 (ongoing)

Housing

Housing Strategy 2012 -15

Housing Strategy (emerging 2018)

Tenancy Strategy 2013

Merton's Older Person Housing Strategy 2008-12

Merton's Neighbourhood Renewal Strategy 2005-10

Affordable Housing Viability Study 2010

Strategic Housing Market Assessment 2018

Housing Market Assessment for the Estate Regeneration Areas, February 2017

Viability for the Estate Regeneration Areas, March 2017

Infrastructure

Infrastructure Projects (table 27.2 Core Planning Strategy)

Infrastructure Needs Assessment Study 2008

Open Space and Biodiversity

Merton's Public Realm Strategy 2009

Merton's Allotment Strategy 2007-10

Borough's Sport, Open Space and Recreation Needs Assessment

Merton's Open Space Strategy 2010

Merton's Free Play Strategy 2007-2012

Wandle Valley Regional Park: A vision for the future update 2009 Planning Core Planning Strategy 2011 Sites and Policies Plan 2014 Policies Map 2014 Pollution Air Quality Action Plan 2018 Contaminated Land Strategy 2005 **Transport** Local Implementation Plan for Transport 2011-2031 Waste South London Waste Plan DPD 2012

Key findings from the review of plans analysis

- All of the plans and programmes listed above will influence Merton's new Local Plan to some degree. However the London Plan, as the spatial strategy for London, the various Mayoral strategies as well as the already adopted Merton's plans, strategies and guidance for example evidence based studies, other adopted development planning policy documents, corporate plans such as the Merton's Community Plan are of particular relevance.
- The objectives contained within these documents will provide the direction for the Local Plan for Merton. Many of the objectives of these plans are related to the sustainability objectives set out in this report. These sustainability objectives will provide a framework within which the policies formulated within the Local Plan should produce the desired outcomes of these plans in a sustainable manner.
- There is a clear hierarchy of plans and programmes in certain areas descending from the international/European and/or national level through to the local level. The implications for a Local Plan generally, tend to become more specific and precise at the local level and regional level. Several issues are highlighted in the analysis of the plans and programmes as detailed in this report. It will be important the Local Plan to reflect this context and to incorporate the requirements of other plans and programmes as appropriate and for the Sustainability Appraisal to consider the sustainability implications during the appraisal process. The key findings other plans analysis are set out below:

Strategic policies

- The National Planning Policy Framework (NPPF) 2018, states that strategic polices are required for the area of each local planning authority should include those policies, and strategic site allocations, necessary to provide:
 - a) an overall strategy for the pattern and scale of development;
 - b) the homes and workplaces needed, including affordable housing;
 - c) appropriate retail, leisure and other commercial development;
 - d) infrastructure for transport, telecommunications, security, waste management,
 - e) water supply, wastewater, flood risk and coastal change management, and the
 - f) provision of minerals and energy (including heat);
 - g) community facilities (such as health, education and cultural infrastructure); and
 - h) climate change mitigation and adaptation, and conservation and enhancement

- i) of the natural, built and historic environment, including landscape and green infrastructure
- 5.7 It further states that:

Plans should make explicit which policies are 'strategic policies'. These should be limited to those necessary to address the strategic priorities of the area (and any relevant cross-boundary issues), to provide a clear starting point for any local policies that may be needed.

Sustainable Development

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

Economic development and town centres

- The Local Plan should promote the development of positive strategies to underpin the planning and development of town centres. It should take account of existing evidence base to inform policies on employment land and premises, including future supply. Furthermore planning policies and decisions should support the role that town centres play at the heart of local communities, by taking a positive approach to their growth, management and adaptation.
- There is a strong case for the Local Plan to protect all existing employment sites unless they are inherently unsuitable.

 Well planned tourism development, such as the regeneration of urban areas, can bring many benefits for local economies and the environment. Policies on economic development also need to consider the potential impacts on the natural

environment that could arise from creating new industry and commerce. All buildings, including non-domestic buildings, should achieve high levels of environmental ratings to mitigate and adapt to climate change.

In addition planning policies and decisions should help create the conditions in which businesses can invest, grow and adapt. Therefore significant weight should be placed on the need to support economic growth and productivity, taking into account, both local business needs and wider opportunities for development.

Social environment, health and wellbeing

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

Climate Change

- The Local Plan should focus on reducing carbon dioxide emissions to assist the UK in meeting its legally binding target of 80% reduction in emissions (of 1990 levels) by 2050 and the London wide target of 60% (of 1990 levels) by 2025. Policies should address climate change and ensure that all new developments reduce carbon dioxide emissions and encourage existing developments to reduce their emissions. The overall aim should be to create sustainable communities with low carbon emissions that are resilient to the effects of climate change and to the volatile energy market through focusing on climate change mitigation, including energy efficiency, as well as climate change adaptation.
- New developments should be planned to avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that

risks can be managed through suitable adaptation measures, including through the planning of green infrastructure. The costs associated with taking preventative action will be much less than those associated with dealing with consequences if action is taken now. Therefore the Local Plan should aim to reduce carbon dioxide emissions to mitigate the effects of climate change, and ensure that predicted changes are taken into account in order to create adaptable communities and buildings.

Flood Risk

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

Biodiversity and nature conservation

- The nature conservation status of designated areas in the borough must be taken into account. Merton Council is a 'Competent Authority' under the EU Habitats and Wild Birds Directives. In advance of undertaking an Appropriate Assessment the Competent Authority should first undertake an assessment of 'Likely Significant Effects' of the plan. This should consider the potential environmental impacts of the Local Plan on European Protected Sites within and outside the borough and determine whether an Appropriate Assessment is required.
- Policies should ensure that areas designated for nature conservation purposes, threatened species and habitats are protected and that development does not have any detrimental impacts on biodiversity. The aim should always be to enhance biodiversity wherever possible. The Local Plan should also plan positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.

Energy and renewable energy

- The Local Plan needs to consider the way energy is supplied and encourage zero and low carbon energy technologies. The aims should be to reduce the contribution to climate change by minimising emissions of carbon dioxide through energy efficiency, combined heat and power, renewable energy and other technologies. There is an expectation that during this Local Plan period, all new developments will need to be zero carbon to contribute towards tackling climate change.
- The council promotes the move towards a low carbon economy and remains committed to working towards zero carbon standards for all new developments. Future changes to energy efficiency standards will be kept under review and policy requirements will be updated with the prevailing standards if required.
- Zero carbon can be best achieved through the application of the energy hierarchy (as set out in the London Plan, whereby development should maximise energy efficiency, use low carbon technologies and reduce carbon dioxide emissions through the use of renewable energy. This should also align with the council's and Government's aim of tackling fuel poverty.

Waste Management

Waste management is covered in the South West London Waste Plan. However the Local Plan policies should reflect the principles of sustainable waste management.

Pollution and contamination

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

Water quality and resources

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

Air Quality

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

Noise

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

Transport

5.29 Sustainable travel and the promotion of sustainable modes of travel should be central and a core principle of the Local Plan. Policies in the Local Plan should focus on sustainable transport and include reducing car dependent development, increase other forms and choice of transport modes and promote vibrancy and economic activity in town centres.

The Local Plan should facilitate more walking and cycling, improve linkages and ensure there are sufficient public transport linkages between homes, work places, local services and amenities. Furthermore, make transport systems more efficient and safer, dealing with direct and indirect impact of road traffic, providing travel choice and accessibility for all (including people with disabilities and reduced mobility) are key issues to consider in the Local Plan. Sustainable modes of transport will also help to achieve the objectives in relation to mitigating climate change and reducing carbon dioxide emissions as well as in relation to reducing air and noise pollution.

Housing

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

Open spaces

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

Historic environment and heritage

The Local Plan and its policies should recognise the unique place the historic environment holds in Merton, including the multiple ways that the cultural and historic heritage supports and contributes to the local, regional and national economy as well as to the wellbeing benefits to residents and visitors. The conservation of these heritage assets and their settings should be a key priority of the Plan and its policies should be in place to protect them from harm and to take opportunities to enhance their significance. The Local Plan should encourage developments that enhance creativity and culture within the borough and any potential impacts of developments on the historic environment and cultural heritage should always be taken into account.

Task A2: Collect and develop relevant social, environmental and economic baseline information and define the character of the area (A2)

Data limitations

- Information or data used to help explain current situations or trends change over time. However, this does not necessarily link cause and effect overtly and is limited in how they can explain why particular trends are occurring and the secondary effects of any changes. The data therefore acts as an indicator and been selected to monitor progress towards the achievement of particular objectives and to provide a tangible measure concerning broader issues. This measure is often only a small component of meeting the objective so may simplify the issues and interactions.
- The appraisal therefore, relies on a mixture of quantified data and professional judgement. Accordingly, the baseline includes a commentary concerning the trend indicated by the current and historical data. External bodies collect much of the data used in this report for example Office of National Statics (ONS) and the Greater London Authority (GLA). The spatial and temporal data collected and future changes to the methodology of the data collect are not within the control of Merton Council. It should be noted there are some gaps in the data collected, as not all information is consistently available.

Merton the place

Merton is an outer London borough situated to the south west of the capital. It borders with the London Boroughs of Wandsworth, Sutton, Kingston, Croydon and Lambeth. The borough is predominantly residential in character (42% of the area) but with variation in density and characteristics of development particularly between the east to west and north to south of the borough, and associated economic and social differences.

Figure 6: Borough of Merton



Merton is the one of the smallest boroughs in London with an area of 37 square kilometres. Merton has many impressive open spaces including Mitcham and Wimbledon Commons that makes the borough one of the greenest boroughs in London. Around 18% of the borough's area is open space, compared to the 10% London average.

- The quality and historical character of the borough reflects the number of high quality heritage areas designated as Conservation Areas. The northern parts of the borough are characterised by tightly packed streets of late Victorian or Edwardian terraced housing around north Mitcham, Colliers Wood, South Wimbledon and Wimbledon Park and larger detached or semi-detached homes around Wimbledon.
- The 1930's suburbia characterises large parts of the south and west of Merton with lower density semi-detached houses and short terraces with gardens, in tree lined roads with wide grass verges. These areas merge with the neighbouring boroughs of Sutton and Croydon. Within Merton there are a number of pockets of affluence and of, multiple deprivation. Although deprivation is mainly in the eastern side of the borough merging with Lambeth and Croydon, there are also some pockets in the west of the borough.

7 Environment

Green infrastructure and biodiversity

- 7.1 Within Merton, there is one Site of Special Scientific Interest (SSSI) designation, Wimbledon Common. Wimbledon Common extends across the borough boundaries of Merton and Wandsworth. As such Wimbledon Common is divided into five units, 3 of which are in Merton and 2 in in the borough of Wandsworth. As well as it SSSI designation, Wimbledon is also designated as a Special Area of Conservation (SAC), SSSI and Water Framework Directive (WFD). Appendix 1 Maps: identifies the SSSI and SAC.
- 7.2 The common measures 351.38 ha and is located 1.5km to the north west of Wimbledon town centre and 1km of Richmond Park. The majority of the SAC is located within Merton and a smaller area within Putney Heath (London Borough of Wandsworth).
- 7.3 The west of Wimbledon Common SAC also borders the Royal Borough of Kingston upon Thames and consists of the following general habitat types:

Inland water bodies (standing water, running water) (1%)
 Bogs Marshes Water fringed vegetation. Fens (0.5%)
 Heath Scrub Maquis and garrigue Phygrana (5%)
 Dry grassland Steppes (45%)

- Improved grassland (3.5%)Broad-leaved deciduous woodland (45%)
- 7.4 Wimbledon Common is one of the largest areas of uncultivated land in London and sits in the Thames Valley Natural Character Area. The underlying soils are mostly sands, gravel and silty clays which give rise to poorly drained, nutrient poor and acid conditions.
- 7.5 Notified features of Wimbledon Common are:

Calluna vulgaris (commonly known as Heather) - Ulex minor heath
Erica tetralix - Sphagnum compactum wet heath
Molinia caerulea - Potentilla erecta mire
Festuca ovina - Agrostis capillaris - Rumex acetosella grassland
Festuca ovina - Agrostis capillaris - Galium saxatile grassland
Quercus robur - Pteridium aquilinum - Rubus fruticosus woodland

Figure 7: Wimbledon Common SSSI - Features from overlapping sites

Feature	Overlapping site	Site Designation
H4010 Northern Atlantic wet heaths with Erica tetralix	Wimbledon Common SAC	SAC
H4030 European dry heaths	Wimbledon Common SAC	SAC
S1083 Stag beetle, Lucanus cervus	Wimbledon Common SAC	SAC
Lowland dry acid grassland (U1a)	Wimbledon Common SSSI	SSSI
Lowland dry acid grassland (U1b,c,d,f)	Wimbledon Common SSSI	SSSI

Lowland dry acid grassland (U4)	Wimbledon Common SSSI	SSSI
Lowland dry heath	Wimbledon Common SSSI	SSSI
Lowland wet heath	Wimbledon Common SSSI	SSSI

Source: Natural England (May 2018)

7.6	Other key environmental assets of Wimbledon Common:	
		eserve Fishpond Wood (managed ry heath and one of London's very few sphagnum bogs ncient monument, Caesar's Camp, can be seen near the Royal
7.7	London centre of distribution for the stag beetle, Lucanus	much fallen decaying timber. It is at the heart of the south cervus. The stag beetle is listed as an Annex II species in the tion of this site. Wimbledon Common also supports a number ying timber.
7.8	The following Annex I habitats are present as a qualifying designation of this site.	feature; however these are not a primary reason for
	Northern Atlantic wet heaths with Erica tetralix) European dry heaths

Figure 8 Wimbledon Common SSSI unit review

Unit name (unit number)	Condition	Condition Threat Risk	Habitat	Area (ha)
Putney health (1)	Unfavourable- Recovering	Medium	Dwarf Shrub Heath - Lowland	64.2291
Hookhamslade (2)	Unfavourable – Recovering	Medium	Acid Grassland - Lowland	129.3094
Wandsworth woodland (6)	Unfavourable – Recovering	Medium	Broadleaved, Mixed And Yew Woodland - Lowland	44.8322
Merton woodland (8)	Unfavourable – Recovering	Medium	Broadleaved, Mixed And Yew Woodland - Lowland	95.395
Southern Grassland/Heathland (9)	Unfavourable - No change	No identified Condition Threat	Dwarf Shrub Heath - Lowland	17.6173

Source: Natural England (May 2018)

Nature Conservation

As well as Wimbledon Common (SSSI), Merton has other areas that are designated for their importance to nature conservation, they are as follows:

Figure 9: Nature Conservation

Sites of Metropolitan Importance for Nature Conservation	5
Site of Borough (Grade1) Importance for	11
Nature Conservation	
Site of Borough (Grade1) Importance for	25
Nature Conservation	
Sites of Local Importance for Nature	22
Conservation	
Local Nature Reserves	15
Source: Merton Local Plan (2014)	

Open space and recreation

7.10 According to Merton's Strategic Open Space Study (MOSS) (2011), there are 677ha of public open spaces within the borough.

Metropolitan Parks (325 ha),
District parks (129ha),
33 local parks (166 ha)
28 small local parks (35 ha)

7.11 The overall level of open space provision within the borough equates to 4.0 ha per 1000 population, comfortably meeting the National Playing Fields Association standard of 2.43 ha per 1000. The distribution of open space varies across the borough. There are a variety of other types of open green space within the borough, including cemeteries, allotments; school playing fields private sports grounds, and unique sites of wildlife value. These additional areas of open space occupy a total area of 467 ha.

Public Rights of way to access greenspaces

- All the Public Rights of Way (PROW) in the borough come under the responsibility of Merton Council. There are approximately 32kms of public rights of way, which the council maintains 12 Local authorities are required to assess the extent to which rights of way meet current and likely future needs of the public. Consideration must also be given to the opportunities provided by local rights of way, such as footpaths, cycle tracks, bridleways and restricted byways, for exercise and enjoyment of the area. A key responsibility is the assessment of the level of accessibility of local rights of way to those with restricted mobility with particular mention for those who are blind or partially sighted.
- 7.13 Merton as the Local Highway Authorities has a duty under the Wildlife and Countryside Act 1981 and the Highways Act 1980 to maintain and keep the definitive map and statement of public rights of way and to ensure that ways are adequately signposted, maintained and free from obstruction. Types of rights of way include:
 - Footpath: When a path is used for walking only, it is a footpath. (This is different from the pavement alongside a road)
 - Bridleway: Bridleways are also footpaths, but additionally users are permitted to ride or lead a horse, and ride bicycles. Horse drawn vehicles are not allowed. Cyclists must give way to pedestrians and horse riders. Motorcycling is not allowed

Conservation Areas and Historic Parks and Gardens

7.14 Merton has a 28 Conservation Area across the borough totalling 656.45 ha. Merton has 3 Historic Parks and Gardens; these are mainly in the west of the borough in the Wimbledon area.

Figure 10: Merton's Historic Parks and Gardens

Name of Historic Park and Gardens	Grade
Cannizaro Park	Grade II*
Wimbledon Park	Grade II*
Morden Hall Park	Grade II
South Park Gardens	Grade II

Listed Buildings

Merton has a rich heritage of buildings, which are of historical or architectural interest. A number of these buildings have been recognised as having a very special architectural or historic interest and have been included on the statutory list that is compiled and managed by Historic England². Currently Merton has around 250 statutory listed buildings.

Scheduled Ancient Monuments

Scheduled monuments are not always ancient, or visible above ground. There are over 200 categories of monuments on the Schedule and they, range from prehistoric standing stones and burial mounds, through to the many types of medieval site (for example Merton Priory – an Augustinian priory). In Merton there are 3 Scheduled Ancient Monuments they are:

Caesar's Camp, Wimbledon CommonMerton Priory, South Wimbledon/Colliers WoodMorden Park Mound, Morden

Historic Sites

Southside House, Grade II* visitor attractionNational Trust, Morden Hall / WatermeadsMerton Abbey Mills

7.17 In Merton there are 4 registered museums in the borough:

All England Lawn Tennis Museum
 Wandle Industrial Museum
 Wimbledon Society Museum of Local History
 Wimbledon Windmill

² https://historicengland.org.uk/

Archaeological heritage

7.18 Merton's historic environment bears more than 10,000 years of human activity, ancient sites, monuments and landscapes, historic settlements, ancient features and finds. Remains of early settlements have also been found along the course of the River Wandle and Roman coins and pottery have been found in the vicinity of the Roman Road and Roman burials have also been discovered in Mitcham. Merton has 20 areas designated as Archaeology Priority Zones (APZs) arranged under a number of archaeological themes.

Figure 11: Archaeological Priority Zones

Type of Archaeological	Name of Archaeological Priority	Description of site APZ
Theme	Zone (APZ)	
Alluvial	Wandle Valley Alluvium	This area includes the alluvial silts deposited within the Wandle Valley. Evidence for both prehistoric human activity, and the contemporary natural environment can be preserved within or beneath the alluvial deposits
	Beverley Brook Valley Alluvium	This area maps the extent of alluvial deposits along the course of the Beverley Brook. Although this area is thought to have played a less significant role than the Wandle Valley in the history of the area, it has potential for the survival of evidence of past environments as well as prehistoric (and later) human activities.
Prehistoric	Wimbledon Common	The status of Wimbledon Common itself means that there has been relatively little archaeological work in this area, but stray/casual finds have demonstrated that evidence covering the whole prehistoric period may be anticipated to survive as buried remains. The Priority Zone Designation extends beyond the modern limits of the Common to include additional areas where archaeological evidence for prehistoric landscapes has been shown to survive
Landscapes	Mitcham Common	This area takes in a swathe of gravel terrace on the eastern side of the Wandle Valley. Finds of Mesolithic and Neolithic flint tools, Bronze Age metalwork, and stray Iron Age coins have been

		recovered from this area, demonstrating the area's significance for early settlement and indicating its potential for the survival of further remains.
	Morden Park	This area encompasses the northern part of the modern Morden Park, where remains of Roman and medieval date have been found. The park contains a Scheduled Monument 'Morden Park Mound', thought possibly to be (or to incorporate) a Roman burial mound, or to be an eighteenth century prospect mound created within Morden Park.
	Merton Village (South Wimbledon area towards Wimbledon Chase)	The medieval estate of Merton originated in the later Saxon period and is first referred to by name in a document of 949 AD. By the time of the Domesday Survey of 1086 the estate included a church and two mills, set within extensive agricultural land.
	Wimbledon	The historic village core occupies higher ground on the watershed between the valleys of the Wandle and the Beverley Brook. Wimbledon is not mentioned in the Doomsday Survey, and it may have formed an outlying grange of the extensive Mortlake estate at that time. Wimbledon is recorded as a separate unit from the early fourteenth century onwards.
Settlements	Mitcham	The earliest historical reference to Mitcham settlement comes from an eighth century document, although archaeological evidence also points to unconnected Roman and early Saxon activity in the area. The medieval village developed as a 'ribbon' settlement along the London-Sutton Road, with two foci: Upper Green (probably also known as Michelham) and Lower Green (also known as Wickford Green).
	Morden	The estate of Morden is first referred to in the tenth century, and appears to have remained polyfocal with a particular cluster in the vicinity of the church throughout the medieval and post-medieval periods (this may be partly explained by its location on London Clay based soils rather than more easily cultivated gravels or river alluvium deposits). There was a second settlement at Lower

		Morden, near the Beverley Brook – this is identified as a separate Priority Zone (Map Area 11).
	Cannon Hill	An indication of human activity in this area on John Rocque's maps of 1749-62 suggests that this area may contain important remains.
	Lower Morden	Medieval finds have been recovered from this area, indicating early human activity.
	West Barnes	This zone covers the location of West Barnes Farm, a Medieval, probably moated, 'Grange' belonging to Merton Priory
Settlement - Communications Routes	'Stane Street'	The line of an important Roman road, crossing the Borough between Colliers Wood and Pylford Bridge. The route of the road is preserved in part by modern streets (High Street Colliers Wood, and parts of London Road, Morden – both parts of the A24), although it appears to have taken a more direct route across Wandle Valley than the present A24 (which runs to the north through Merton).
	Wandle/Copper Mill Lane	A centre of water-powered and water utilising industry from at least the medieval period onwards, this area included medieval corn mills and an eighteenth century copper mill. The latter was located at the end of Copper Mill Lane and was replaced, in the nineteenth century by a mill for the processing of leather
	Wandle/Colliers Wood	This area has formed a particular focus for riverside industry from at least the medieval period onwards, with several corn mills being located along this stretch of the river during the medieval period. These were supplanted in the post-medieval period by textile processing and finishing industries, initially calico bleaching and printing and subsequently the textile printing works of Arthur Liberty and of William Morris
	Wandle/Mitcham	The Wandle Riverside around Mitcham was famed in the eighteenth and nineteenth centuries for the market gardening of aromatic and medicinal herbs, watercress and other crops. It was also important in the seventeenth and eighteenth centuries for

Riverside Industries		calico bleaching and printing, copper, flour, and snuff milling, leather working and the manufacture of paper, flock and felt.
	Mill Corner	Documentary sources indicate the presence of a water mill on this part of the Beverley Brook in the fifteenth century, and also a series of fishponds. The mill appears to have been demolished sometime before the eighteenth century.
	Merton Place	Built around 1700, between the village of Merton and the River Wandle, possibly on the site of an earlier, medieval, moated structure. The house is noted as being the only house owned by Admiral Nelson who converted the moat into a garden feature and called it 'The Nile'.
Post Medieval Estates and Gardens	Wimbledon Park House	The house was originally built in 1588, but was much altered in the 1640s by Inigo Jones. The site of the early House is not known with certainty, but it is thought to lie close to the village church.
	Morden Hall and Park	The existing Morden Hall dates from the mid-eighteenth century, replacing an earlier, Tudor Manor House to the south. The Hall is moated and the moat is an eighteenth decorative feature contemporary with the house.

Blue infrastructure

Rivers

- 7.19 The River Graveney flows in an approximately east to west direction along the northern boundary of Merton. The area to the north east of Mitcham Eastfields railway station to be defined as Flood Zone 2 associated with the River Graveney, extending towards Oakleigh Way Recreation Ground and the northern part of Figge's Marsh.
- 7.20 Beverley Brook is a minor English river 14.3 km (8.9 mi) long in southwest London. The Beverley Brook flows in an approximately south north direction along the western boundary of Merton and eventually discharges into the River

Thames at Barnes. It rises in Worcester Park and joins the River Thames to the north of Putney Embankment at Barn Elms.

The Pyl Brook is a tributary of the Beverley Brook. The Pyl Brook rises to the south of Sutton Common train station before flowing in an approximately south-east to northwest direction through Merton and connecting to the Beverley Brook in Beverley Park on the western boundary of Merton. An approximately 600m section of the Pyl Brook running adjacent to West Barnes Lane is culverted between Kingsway and Raynes Park High School. The Derwent Road Flood Storage Area provides additional storage from the Pyl Brook during periods of high flow. Areas surrounding Raynes Park High School, Memorial Ground, Westway and West Barnes Lane are defined as Flood Zone 3 associated with the Pyl Brook. Areas surrounding Cannon Hill Lane and Lower Morden Road are defined as Flood Zone 2. Appendix 1 Maps: identifies the rivers and flood zones in Merton.

Ordinary watercourse³ and reservoirs

- In total there is approximately 69km of ordinary watercourse in Merton, approximately 5km of which is culverted⁴. The majority of watercourses are located in Wimbledon Common, Mitcham Common, Raynes Park area, Cannon Hill Common and Wimbledon Park. Merton has 1 reservoir, Wimbledon Park Lake as defined under the Reservoir Act 1975 which is raised.
- The lake in Wimbledon Park dates back to 1765 when it was created for the first Earl Spencer as the central feature of a landscaped park in front of the family's mansion house located on the high ground up what is now Church Road towards Wimbledon Village. Responsibility for design was given to Lancelot 'Capability' Brown, was, then and still now, acknowledged as one of England's foremost landscape architects. 'Capability' Brown spent some 20 years transforming the formal Renaissance Gardens into a more natural landscape, including building a dam across the valley to convert a marshy stream and surrounding bog into an impressive 30 acre lake. The lake passed into public ownership in the early 20th Century, when it was purchased by the forerunner of Merton Council. Since then the lake has been used primarily as a reservoir and for leisure purposes including swimming, water sports and angling. The council has a Statutory and legal obligation to maintain the reservoir under Section 10 of the Reservoirs Act, 1975.

³ A watercourse that is not part of a main river... all rivers and streams, ditches, drains, cuts, culverts, dikes, sluices, sewers (other than public. sewers within the meaning of the Water Industry Act 1991) and passages, through which water flows.'

⁴ A culvert is a structure that allows water to flow under a road, railroad, trail, or similar obstruction from one side to the other side. Typically embedded so as to be surrounded by soil, a culvert may be made from a pipe, reinforced concrete or other material.

Flood risk management

- The Level 1 SFRA (December 2015) assesses the flood risk in the borough using the most up to date readily available flood risk information for all sources of flooding and provides the information to enable each borough to apply the sequential test. The report contains planning policy recommendations and a site assessment database for the purpose of undertaking the 'sequential test on potential development sites.
- 7.25 The Level 2 SFRA (January 2017) provides the necessary information to justify the potential development of sites through satisfaction of the exception test and will provide information and recommendations on the suitability of SuDS and site specific flood risk mitigation measures.
- Flood defences are structures which affect flow in times of flooding in order to reduce the risk water entering property. They generally fall into one of two categories; 'formal' or 'informal'. A 'formal' flood defence is a structure which has been specifically built to control floodwater. It is maintained by its owner or statutory undertaker so that it remains in the necessary condition to function. In accordance with the Flood and Water Management Act 2010, the Environment Agency has powers to construct and maintain defences to help against flooding. An 'informal' defence is a structure that has not necessarily been built to control floodwater and is not maintained for this purpose. This includes road and rail embankments and other linear infrastructure (buildings and boundary walls) which may act as water retaining structures or create enclosures to form flood storage areas in addition to their primary function.

Figure 12: Properties at risk of fluvial flooding by Drainage Catchment

Flood Zone	1	Flood Zone	2	Flood Zone 3	За	Flood Zone	3b
Residential	Non residential	Residential	Non residential	Residential	Non residential	Residential	Non residential
78,864	3,698	5,106	316	1,272	101	254	20

Source: Merton Strategic Flood Risk Assessment 2015

Notes: The property counts are generated by calculating the number of properties that intersect with each of the Flood Zones. Where properties intersect two Flood Zones, the property has been counted in the category of greatest risk. Counts have been provided by Drainage Catchment. Ordnance Survey Master Map was used to provide a dataset of

all the buildings in the study area. Polygons with feature codes 10021, 10062, 10185 and 10187 were classified as buildings. The number of addresses located at basement or ground floor level associated with each OSMM building polygon was determined using the Environment Agency National Receptor Database (NRD).

Figure 13: Properties at risk of surface water flooding by Drainage Catchment

uFMfSW Low		uFMfSW Medium		uFMfSW High	
Residential	Non residential	Residential	Non residential	Residential	Non residential
78,864	3,698	5,106	316	1,272	101

Source: Merton Strategic Flood Risk Assessment 2015

Notes: The property counts are generated by calculating the number of properties that intersect with each of the categories within the uFMfSW. Where properties intersect two or three categories from the uFMfSW, the property has been counted in the category of greatest risk. Counts have been provided by Drainage Catchment. Ordnance Survey Master Map was used to provide a dataset of all the buildings in the study area. Polygons with feature codes 10021, 10062, 10185 and 10187 were classified as buildings. The number of addresses located at basement or ground floor level associated with each OSMM building polygon was determined using the Environment Agency National Receptor Database (NRD).

River biodiversity

- 7.27 The River Wandle is naturally a chalk stream and described as a rare and unique type of river. However, the long standing urban nature of the river has resulted in certain stretches being healthier that other parts of the river, with weirs commonly preventing fish from moving freely along the river.
- The Environment Agency and partners are studying the options for improving fish movement up and down the River Wandle. An increase in fish passage will be required to enable the River Wandle to meet objectives set by the Water Framework Directive. In 2013 the Environment Agency fisheries survey on the River Wandle through Merton revealed a diverse fish population including:

chubroacheelgudeondace

perchdacecarp bullheadstone loach

7.29 A fish survey of Wimbledon Common showed excellent fish populations to be present including chub, dace, eel, gudeon, roach and 3 spined stickleback

Water supply and waste water treatment

Water supply

- London's Victorian sewerage and water supply network is struggling to cope with current demands. Thames Water forecasts that, without significant new investment, demand for water will exceed supply by 10% in London by 2025, rising to 21% by 2040. This equates to a deficit of over half a billion litres of water a day by 2050. London's combined sewer system, built over 150 years ago was designed for a smaller, more permeable city. The challenges of London's growing population, changing land uses and changing climate mean that London is outgrowing its drains and sewers. This in turn is a contributing factor towards the increasing the risk of flooding.
- 7.31 The majority of Merton falls within Thames Water Utilities Ltd (known as Thames Water) resource zone apart from some areas near the borough boundary with Sutton. Merton's average water consumption is 160 litres per day (160/l/d) (2012), which is slightly above the London average (164/l/d), with around 25% of households with water-meters installed within their homes, an increase of 15% from 2001/01. Merton's population, as with the rest of the London population, mainly rely on water supplies that have originated from outside London. 55% of the available water lies within the Thames Basin, 80% used for public water supply purpose.

Sewage treatment works

Merton is served by "Crossness" sewage treatment works; in 2009 it served a population of 1, 1890,000. Crossness is permitted to discharge 1,485,00m3/d of treated sewage effluent into the Thames Tideway. There are planned upgrades which will provide sufficient treatment at Crossness to ensure that it can cope with London's growing population to at least 2021 whilst improved quality effluent to meet water quality requirements. The improvements will enable the site to

treat 44% more sewage than at present. This increase in treatment capacity will allow for a 6% increase in population until 2021.

Waste management

7.33 The total of collected waste in Merton in 2017/18 was 75,173 tonnes. Household waste accounts for around 70,700 or 94% Merton's total collected waste. Collected household waste per household for 2017/18 was 537kg and waste collected sent to landfill, falling was 55% during 2017/18. According to The Department for Environment, Food and Rural Affairs (Defra) recycling and composting of the borough's collected waste has increased from 18% (2005/06) to 36% (2011/12).

28% dry recycling
9% composting

Energy use and supply

- 7.34 Reducing overall energy consumption and being more energy efficient is vital to reducing greenhouse gas emissions and contributing to a secure energy future. Reducing energy consumption through more efficient buildings and appliances can also help to tackle issues of energy affordability and fuel poverty.
- 7.35 Fuel poverty continues to be an issue in London, with 9.8% or 326,114 households meeting the Government's 'low income high cost' definition of fuel poverty (compared to 10.4% across England). However as the definition favours larger homes, there may be many households in smaller properties who also struggle to pay their fuel bills despite not meeting the definition.
- Fuel poverty is tends to be more prevalent in inner London boroughs and lessens in outer London. However in Merton it is estimated that 10.2% of household (8,151) are fuel poor, which is similar to London and England (2015). Between 2012 and 2014 levels of fuel poverty in Merton increased, although 2015 shows a slight fall. A similar trend is evident across London.
- 7.37 The demand for energy changes by season. In the winter months, consumption of gas is higher due to use of central heating for buildings. However in the summer months, there is a general shift towards higher electricity use from air conditioning to cool buildings. Consumption can also vary from year to year depending on the weather.

Gas usage has decreased since 1990, and this trend is expected to continue despite projected population growth, however it is very much dependent upon national energy policies. Electricity usage has stabilised despite the increase in population, largely due to increased efficiency of appliances. However, it is expected that demand for electricity to rise as population continues to grow and heating and transportation are increasingly electrified, in favour of electricity from a decarbonised grid.

Noise and Vibration

- There is no single definition of noise. Noise can be defined as unwanted sound. Often referred ironically, as the silent polluter, in that its effects can be hard to establish. This is because the problem is psychological: differences in perception such as the type or loudness of music for example. Noise disturbance can be associated with health problems such as sleep disturbance, stress, anxiety, high blood pressure, poor mental health in adults and school performance and cognitive impairment in children. Noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities. Continuous effects of noise pollution can also result in higher rates of cardiovascular disease and deteriorating mental health. Some of the main sources of noise across Merton are likely to include impacts from increasing levels of traffic on roads.
- 7.40 Three types of noise are defined in the Noise Policy Statement for England (NPSE) (March 2010); these are:
 - environmental noise: which includes noise from transportation sources
 - neighbour noise: which includes noise from inside and outside people's homes
 - neighbourhood noise: which includes noise arising from within the community such as industrial and entertainment premises, trade and business premises, construction sites and noise in the street
- 7.41 The main source of ambient noise in Merton is road traffic. However other activities such as construction, busy high streets, or a greater vibrant night time economy may also impact noise levels. The Environmental noise directive (END) 2002/49/EC requires Member States to establish through the process of noise mapping, the number of people exposed to noise above certain levels from major roads, major railways, major airports and large urban areas. Once these areas are mapped the Directive requires member states to adopt action plans to manage noise issues and effects, including noise reduction if necessary. Appendix 1 Maps: identifies the noise sensitive areas.

Air Quality

- Air quality is a major concern throughout the UK and particularly in London, largely due to road traffic emissions; but other sources of pollution also contribute. Significant health effects are associated with atmospheric pollutants linked to ill health and death. The Environment Act 1995 introduced the Local Air Quality Management System, which requires Local Authorities to undertake regular review and assessment of air quality, with respect to the standards and objectives set in the Air Quality Strategy and enacted through the Air Quality Regulations in 1997, 2000, and 2002.
- In areas within the borough where an air quality objective has not been met by the required date local authorities are required to establish Air Quality Management Areas (AQMA) and implement action plans to improve air quality. The management of Merton's air quality is through the Local Air Quality Management (LAQM) Plan which regularly reviews and assesses air quality in the borough and determines whether the air quality objectives are met. In accordance with the LAQM the council has designated the entire borough as an Air Quality Management Area (AQMA) for following pollutants:
 - Nitrogen Dioxide we are failing to meet the EU annual average limit for this pollutant at some of our monitoring stations and modelling indicates it is being breached at a number of other locations. We may also be breaching the UK 1-hour AQ Objective based on measured concentration for NO2 being in excess of 60μg/m3 at some locations within the borough.
 - Particulate Matter (PM10) whilst monitoring data from the automatic monitoring station at South Wimbledon indicates we are complying with the UK Objectives and EU Limits, the wider modelling data indicates that we are likely to be breaching the 24-hour and annual mean PM10 Objectives at a number of locations across the borough. We are also exceeding World Health Organisation air quality guideline for this pollutant, and we have a formal responsibility to work towards reductions of PM2.5.

London Borough of Merton LAEI 2013 Annual Mean NO2 concentrations 2013 140- lustral 24-57 40-47 ferrage MAYOR OF LONDON GHEMESICHOONAUH KORE Y CLEANERAIR

Figure 14: Modelled map of annual mean NO2 concentrations (from the LAEI 2013)

7.44 The modelled NO₂ concentrations clearly identify the contribution of road traffic emissions with exceedance of the NO₂ annual mean objective closely correlated with the main transit routes and busy junctions within the borough.

London Borough of Merton

Annual Mean PM to concentrations 2013

| Appoint | Probability | Probabili

Figure 15 Modelled map of annual mean PM₁₀ (from the LAEI 2013)

7.45 Exceedance of the PM₁₀ annual mean objective also extends along the main transport links. The main areas of concern are in the centre of Morden and a section of the B272 Beddington Lane in the south east corner of the borough.

London Borough of Merton LAEI 2013 Annual Mean PM₂₅ concentrations 2013 "Maggioth" 21+32 25 + 25 25 - 27 27-32 + 32 As in the MAYOR OF LONDON GREATERDHOOMAL/DIGS TV CLEANERAIR

Figure 16: Modelled map of annual mean PM2.5 (from the LAEI 2013)

PM2.5 concentrations are not currently monitored in Merton but the dispersion model identifies elevated concentrations along the main transit routes and in the town centres within the borough, as would be expected. There is no regulatory standard applicable to English local authorities in respect of PM2.5 however, the EU Ambient Air Quality Directive (2008/50/EC) does set out AQ standards including an exposure reduction obligation, a target value and a limit value (25μg/m³ by 2020).

7.47 An air quality Focus Area is a location that has been identified as having high levels of pollution and human exposure.

There are four focus areas in the borough. These are in the main centres of Mitcham, Morden, Raynes Park and Wimbledon.

Figure 17: air quality Focus Area

Focus Area Ref.	Location
Focus Area 134	Mitcham - London Road A216 from Cricket Green to Streatham Road junction
Focus Area 135	Morden - Morden Road/London Road/Morden Hall Road/Martin Way
Focus Area 136	Raynes Park - junction Kingston Road/Bushey Road
Focus Area 137	Wimbledon - The Broadway/Merton Road/Morden Road/Kingston Road

Source: Merton's Air Quality Action Plan (2017 -2022)

Focus Areas LAEI 2013 in Merton

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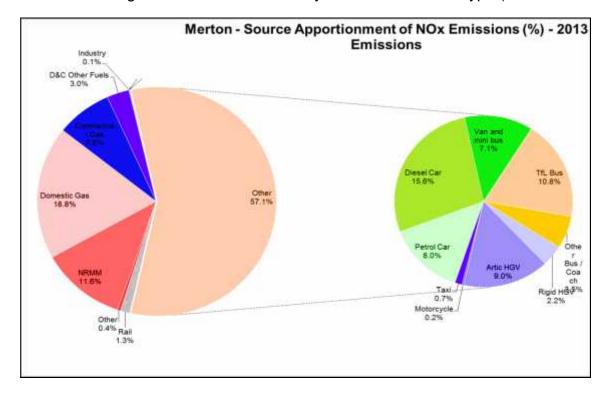
Figure 18: Map of London Borough of Merton Focus Areas (2013)

Sources of Pollution in Merton

Pollution in Merton comes from a variety of sources. This includes pollution from sources outside of the borough and in the case of particulate matter; a significant proportion of this comes from outside London and beyond the UK. Of the pollution that originates in the borough the main sources of NO₂ are transport (57.1%), domestic gas boilers (18.8%) and static non-road mobile machinery (11.6%). The main sources of particulate matter are road transport (50.4%), re-

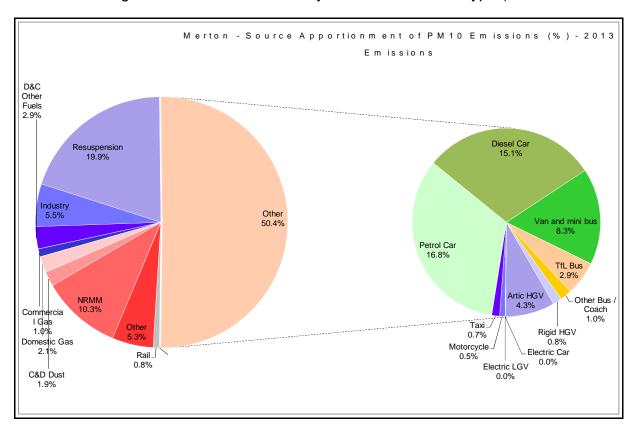
- suspended dust from roads and surfaces (19.9%) and static non-road mobile machinery (10.3%) See figures 19 -21 below for further information.
- In respect of the transport sources the LAEI source apportionment data for the borough indicates that diesel vehicles contribute approximately 90% of the NOx emissions and 80% of the PM10 emissions (based on 2013 modelled data). This supports the evidence from the dispersion modelling (figures 19-21) which indicates that the highest concentrations of both NO₂ and PM₁₀ are most closely associated with the main traffic routes and road junctions within the borough.

Figure 19: NO_x Emissions by source and vehicle type (from the LAEI 2013)



Source: Merton's Air Quality Action Plan (2017 -2022)

Figure 20: PM10 Emissions by source and vehicle type (from the LAEI add date)



Source: Merton's Air Quality Action Plan (2017 -2022)

Merton - Source Apportionment of PM2.5 Emissions (%) - 2013 **Emissions** 20.0% 18.0% 16.0% 14.0% 12.0% 10.0% 8.0% 6.0% 4.0% 2.0% Other Bus Loach 0.0% Diesel Car bus Og Cother Fuels Connectial Cas Residention . Donestic Gas Motorcycle **Petrol** Car Rigid HGV AdicHey Car Dust Industry

Figure 21: PM_{2.5} Emissions by source and vehicle type (from the LAEI 2013)

Source: Merton's Air Quality Action Plan (2017 -2022) NB: Non road mobile machinery (NRMM)

7.50 The largest source of NO_x from transport sources is derived from:

- Diesel cars (15.6%)
- HGVs (rigid and articulated) with combined emissions of 11.2%,
- TfL buses (10.8%),
- Petrol cars (8%)
- Vans/minibuses (7.1%).

- Merton's Air Quality Action Plan (AQAP) (2017- 2022) states in terms of targeting particular vehicle types for selection of Action Plan measures, the borough source apportionment data does not identify any clear dominance in terms of vehicle type but indicates that diesel vehicles across all types are contributing 92% of the total road -NO_x emitted. This suggests that AQAP measures actions need to address emissions from all vehicle types but focus on those which are diesel powered. This includes general measures which aim to reduce traffic volume and improve traffic flow but also more specific measures to increase the proportion of low emission vehicles in the general fleet such as increasing number of electric cars and vans; improving emission standards for local bus and taxi fleets and reviewing freight and delivery practices to minimise emissions in areas with poorest AQ.
- The predominant source of non-transport related NO_x emissions is commercial and domestic gas which contributes 26.4% of total NO_x emissions and non-road mobile machinery which contributes 11.6%. Merton is limited in terms of reducing domestic gas NO_x emissions as the council no longer has any housing stock, however the Merton Air Quality Supplementary Planning Document (SPD) and the GLA Air Quality, Neutral policy for London boroughs provide some controls on heating appliances for new and redeveloped properties and businesses.
- For non-road mobile machinery (NRMM), Merton has jointly commissioned a NRMM emissions study to identify compliant machinery and develop a checklist for contractors which will be used to improve emissions from machinery and equipment operated on development sites. Similarly for particulate matter, the dominant source of emissions is transport and within that sector diesel powered vehicles collectively contribute more than 80% of PM10 emissions. Measures to address transport sources generally, and to reduce reliance on diesel fuels, will have a positive impact on PM10 and PM2.5 emissions.
- One additional source of particulate matter is the re-suspension of dust from roads and commercial and development sites. For development sites re-suspension of particulate matter is controlled to some extent by use of the Sustainable Design and Construction and Control of Dust and Emissions Supplementary Planning Guidance and for highways sources, existing street cleansing regimes will have some benefit.

8 Social

Population and human health

- Merton has a diverse and growing population. In 2018 Merton has an estimated resident population of 209,400, which is projected to increase by about 3.9% to 217,500 by 2025. The age profile is predicted to shift over this time, with notable growth in the proportions of older people (65 years and older) and a decline in the 0-4 year old population⁵.
- The east of the borough has an estimated resident population of 110,200 (in 2018) which, is projected to increase to 113,900 by 2025 (+ 3.3%) compared to the west of the borough, which has an estimated resident population of 99,200 (in 2018) which, is projected to increase to 103,600 by 2025 (+4.5%).
- Significant social inequalities exist within the Merton; the east of the borough has a younger (aged 0-29), lower income/poorer and is an ethnically mixed population. While the west of the borough is mostly white, older (aged 35 and over) and has a higher income when compared to the east of the borough. As a result the population in the east of the borough have greater levels of inequalities such as health and income.

⁵ GLA 2016-based Demographic projections round, housing led model

Population in Merton (all persons) by single age band, 2018 and 2025

Source: GLA 2016 based projection

4500
4000
3500
500
1000
500
0-4
5-17
18-64
55-84
85+
0
5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90+
Age

Figure 22: Single age band in Merton 2018 and 2025

The number of live births in Merton in 2016 was 3,246. There is a general downward trend in number of births in Merton. It is estimated that by 2025 the figure will decrease to 3,158 births⁶. There are currently 15,450 0 - 4 year olds (7.4% of the total population) in Merton (2018). By 2025 this is predicted to decrease to 15,150 (-7%). Both east and west Merton are predicted to show a decrease in the 0-4 year population by 2025, to 8,470 in the east and 6,680 in the west⁷

- 2025

Figure 23: 0 - 4 years olds comparing the east and west of the borough

Age	East of the borough	West of the borough
0 – 4 year olds	8,700	6,750

Source: GLA 2016-based Demographic projections round, housing led model

⁶ Births file, ONS

 $^{^{7}\ \}mathrm{GLA}\ 2016\text{-}\mathrm{based}\ \mathrm{Demographic}\ \mathrm{projections}\ \mathrm{round},\ \mathrm{housing}\ \mathrm{led}\ \mathrm{model}$

8.5 There are 32,800 5-17 year olds in Merton (15.7% of the total population) in 2018. By 2025 this is predicted to increase to 34,100 (remaining at 15.7% of the total population). Both the east and west of the borough are predicted to show an increase in this age group by 2025 to 18,500 in the east and 15,600 in the west.6

Figure 24: 5- 17 year olds comparing the east and west of the borough

Age	East of the borough	West of the borough
5- 17 years olds	17,800	15,000

Source: GLA 2016-based Demographic projections round, housing led model

Population density currently in east of the borough is 69 people per hectare compared to only 46 people per hectare in 8.6 west Merton and 55.7 per hectare in Merton overall; compared to London's 57.3 per hectare. By 2025 it is predicted there will be over 73.6 people per hectare in the east compared to 48.5 people per hectare in the west and 59.2 per hectare in Merton overall compared to 61.4 per hectare in London.8

Merton's diverse communities

The 2011 Census identified that: 8.7

48.4% of the population are white British, compared to 64% in 2001. 35% of Merton's population is from a Black, Asian and Minority Ethnic (BAME) groups (this includes non-white British).

The findings of the 2011 when compared to 2001 Census identified: 8.8

-10% decrease in the overall White population -6% increase in the Asian,

-3%increase in the Black population

-2% increase in Mixed groups

According to the Greater London Authority (GLA): 2015 round ethnic group projections there are currently 77,740 people 8.9 (37% of Merton's population) are from a BAME group. This projected to increase by 2025 to 84,250 people (+1%).

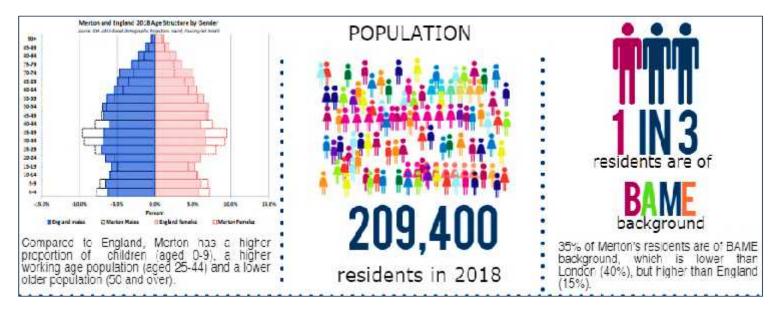
⁸ Greater London Authority (GLA) Population density projections

8.10 Merton is home to people of many religious faiths and beliefs:

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56.1% of Merton residents are Christians (a decrease of 7.5% since 2001),
8.1% Muslim
6.1% Hindu
0.9% Buddhists
```

J 0.4% JewishJ 0.2% SikhJ 20.6% of residents are not religious (4.1% increase since 2001).

Figure 25: summary of Merton's populations

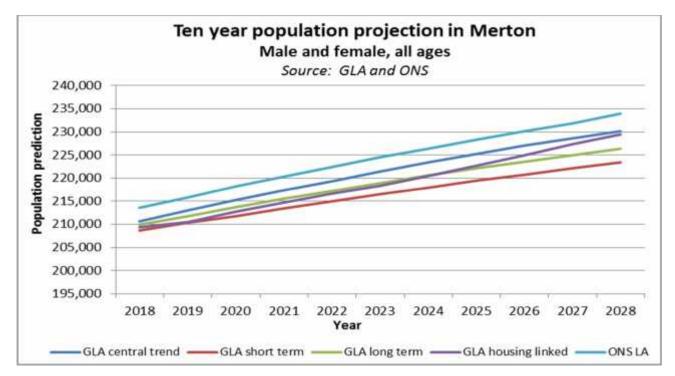


Future population growth

Figure X below shows Merton's population predictions from the Greater London Authority (GLA) Intelligence Unit and Office of National Statistics (ONS); we can see there is variance between them. The GLA projection is based on 2016

population figures and ONS on 2014. Based on the population projection shown in figure X, Merton's is expected to see an increase of between 6% -9% by 2028.





- 8.12 Differences in methodology between ONS and GLA trend-based projections (figure x, above)
 - GLA projections use a 2016 based population for their projections whereas ONS projections are based on a population from 2014
 - The GLA housing linked projections incorporate data from the 2016 Strategic Housing Land Availability Assessment (SHLAA) and is the most likely scenario for future population growth in London. It is therefore recommended by GLA for borough level data requirements

- J GLA covers only London population whereas ONS covers the UK
- Population projections from ONS are available for the UK and its constituent countries as national population projections and for regions, local authorities and clinical commissioning groups in England as subnational population projections. Data is also available for areas such as fertility births, deaths and migration

Figure 27: Merton's population projection percentage differences

Data source	Increase/decrease (%) (2018 -2028)
GLA Central term trend (2016)	8.5%+
GLA Short term trend (2016)	6.5% +
GLA Long term trend (2016)	7.2% +
Strategic Housing Land Availability	8.7% +
Assessment (SHLAA) (2016)	
ONS Population projections for local	4.6%+
authorities (2016)	

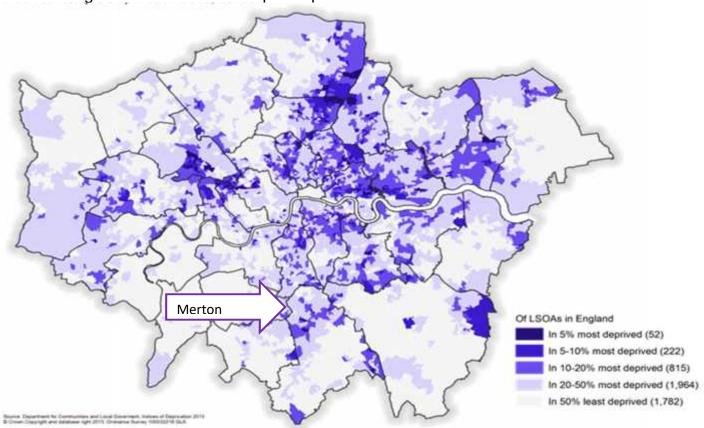
Indices of Deprivation 2015

8.13 The Indices of Deprivation 2015 provide a relative measure of deprivation in small areas across England referred to as Lower Super Output Areas (LSOAs). There are 124 are in Merton. Each LSOA has an average of approximately 1500 residents or 650 households, most but not all LSOAs map well to individual wards there are 6 to 7 LSOA areas in each Merton ward, so an exact ward analysis cannot be provided. The Indices of Multiple Deprivation (IMD) sets out a relative position for each local authority in the country, giving an overall score for each area. The 2015 indices ranks Merton as 7th least deprived out of the 33 London boroughs and 212 out of 354 local authority areas (where 1 is the most deprived) for the rest of England. However this figure hides inequalities in the borough between deprived wards in the east of the borough (Mitcham, Colliers Woods and Morden areas) and the more affluent wards in the west (Wimbledon, Raynes Park and Wimbledon Village areas).

Figure 28: Indices of Multiple Deprivation comparison

The Indices of Multiple Deprivation (IMD) 2007	The Indices of Multiple Deprivation (IMD) 2015
5 th out of 33 London boroughs)	7 th (out of 33 London boroughs)

Figure 29: Indices of Multiple Deprivation



Child poverty

Around 5,305 (13.3%) children under 16 years in Merton are living in poverty (2015) which is lower than both London (18.8%) and England (16.8%). On 31st March 2017, there were 152 children in care. This continues the trend of gradual increase since 2012, although the number typically lies within the range of around 150-160 at any given time. The rate of children in care (36 per 10,000 children) is significantly lower compared with London (50 per 10,000 children) and England (62 per 10,000 children)⁹. 30

Child deprivation headlines:

- Merton ranks 118th nationally for overall deprivation IMD (out of 152 upper tier local authorities, where 1 is the most deprived);
- Merton ranks 103th nationally for overall deprivation IDACI (out of 152 upper tier local authorities, where 1 is the most deprived);
- By both IMD and IDACI measures where data is aggregated to ward level the six most deprived wards in Merton remain Cricket Green, Figge's Marsh, Pollards Hill, Ravensbury, Lavender Fields, and St Helier.
- Our wards demonstrate greater levels of deprivation when viewed through the IDACI score ranking deprivation for children.
- By the IDACI measure we have 6 of the top 10% most deprived LSOAs of England in Pollards Hill, Figge's March, Cricket Green and Abbey wards. By 2020 we are anticipating a c.20% population growth in children aged 11-15 in Abbey, Cricket Green and Figge's Marsh wards.

Life expectancy

8.15 Life Expectancy at birth in Merton is 80.4 years for males and 84.2 years for females. 10

Figure 30: Life expectancy

East of the borough	West of the borough
Female 83.3 years	Female 85.0 years
male 78.9 years	Male 82.1

⁹ Children looked after in England 2015-2016, Department for Education September 2016

¹⁰ Public Health Outcomes Framework (PHOF)

There is a gap of 6.2 years in life expectancy for men between the 30% most deprived and 30% least deprived areas in Merton, and the gap is 3.4 years for women. Healthy life expectancy at birth in males is 65.4 years and 66.3 years in females, therefore many residents are living a considerable proportion of their lives with ill health.



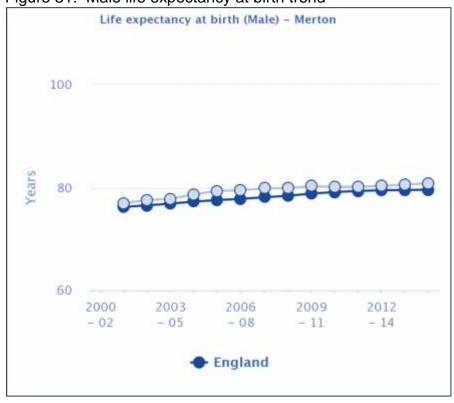
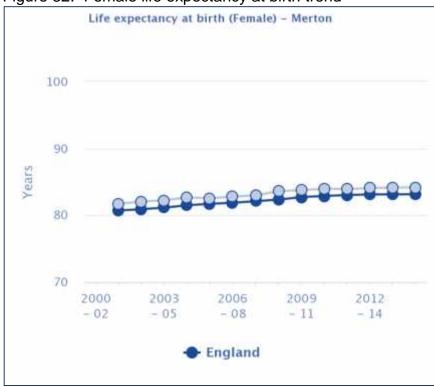


Figure 32: Female life expectancy at birth trend



Source Public Health, local authority health profile

¹¹ Local Health, Public Health England

8.17 Premature mortality (deaths under 75 years) is strongly associated with deprivation. All the wards in the east of the borough are 'more deprived' and have higher rates of premature mortality than the west. Of all deaths in Merton between the years of, 2013 - 2017; 31.8% were premature (just under 1 in 3). In the 30% 'least' deprived wards 25.9% of deaths were premature (1 in 4), compared to 38.4% of deaths in the 30% most deprived wards (about 2 in 5). Comparing this data to previous years (2011-2015), the percentages of premature deaths have dropped in both the least deprived and most deprived areas.¹²

Adult Health

- The numbers of people in Merton with unhealthy behaviours is substantial. This is despite some positive rankings against London and England for these primary risk factors. Around 17.3% of adults aged 19+ are doing less than 30 minutes of moderate intensity physical activity a week (2016/17). This is a lower proportion than London (22.9%) and England (22.2%), but still equates to around 28,000 people. It should be noted that this latest figures include adults from the age of 19+ whereas previous data included was from age 16, therefore it is not possible to compare the two to identify trend.
- 56.7% of adults in Merton aged 18 and over are overweight or obese (2016/17). This has fallen slightly from 2015/16, but equates to over 90,000 people and is a higher proportion of the population than London (55.2%) but lower than England (61.3%). The percentage of adults in Merton aged 18 years and over whom smoke is 12.7% (2016). This level of smoking is lower than London (15.2%) and England (15.5%) but still equates to just over 20,100 people in Merton that smoke.
- In 2016/17 across all ages, 1.9% (4,200) Merton residents had a cancer diagnosis (as recorded on GP practice disease registers); this percentage is slightly higher rate than London (1.8%) but lower than England (2.6%)¹⁴. In general cancer prevention screening levels in Merton appear similar or slightly higher than London but lower than England, with most recent data showing 52.2% (bowel), 67.9% (cervical) and 70% (breast) of the eligible populations that were screened.
- In terms of self-reported wellbeing and emotional resilience, 8% of the Merton population aged 16 and over reported a low happiness score compared to 8.3% in London and 8.8% in England (2015/16) and 22.2% of people aged 16 and over reported a high anxiety score compared to 20% in London and 19.4% in England.¹⁷

¹² Primary Care Mortality Database, 2013-2017

¹³ Public Health Profiles, Public Health England

¹⁴ Cancer services profile, Public Health England

Merton 13.8% of residents have a disability or long term health condition, of which 4.2% receive disability allowance or disability allowance and attendance allowance combined. 1.3% of men are registered as having a disability compared with 1.4% of women (2001).

Mental health

- The Mental Health Foundation reports that 75% of adult mental health problems begin before the age of 18. In Merton there is an estimated 24,000 adults (16-74 years) with common mental health disorders such as depression and anxiety (2014/15), representing 16.1% of Merton's 16- 74 year olds. Merton's figure is similar to London with 16.4% and England at 15.6%. However in 2016/17, only 12,154 adults (16-74) were identified with depression by Merton GPs (6.9% of patients); a lower proportion than England 9.1%, but slightly higher than the London average of 6.4%)¹⁵.
- This suggests that a substantial proportion of adults in Merton experiencing common mental health conditions remain undetected and this lack of primary care identification against expected prevalence is likely to make managing diabetes and other long term conditions, not to mention depression itself, much more challenging, with poorer overall health outcomes for the individual.

Child and young people health profile

- The 2011 Census identified Merton's children and young people (0-19) population as 47,499, this figure is predicted to increase by between 3% and 6% according to the Greater London Authority (GLA), Strategic Housing Land Availability Assessment (SHLAA) population projections. On the whole Merton has a younger population when compared to average in England.
- 8.26 Key headlines on children and young people health:

In Merton an estimated 4,500 children aged 4 -11 years are overweight or obese (equivalent to 150 primary school classes).

One in five children entering Reception Year are overweight or obese (increases to one in three children when leaving primary school in Year 6).

Childhood obesity contributes to health inequalities - the gap in overweight and obesity between the east and west of the borough is widening in both Reception and Year 6 and is nearly 10% in Year 6.

¹⁵ Common Mental Health Profiles, Public Health England

- There are a number of primary schools in Merton where over 50% of children in year 6 are classed as overweight or obese.
- Overweight and obese children are more likely to experience bullying and stigma. This can affect their self-esteem and could affect their performance at school.

Education and skills

8.27 The number of school found in Merton are as follows:

Figure 33: Number of schools in Merton

Type of school	Number of schools
Primary	44
Secondary	9
Six form	9
Special Needs	6 (including sixth form provision)
Independent	15

Source: Merton education team

- 6.28 *(School readiness*¹⁶ is a key measure of a child's development. The percentage of children in Merton achieving a *(good level)* of development at Reception, in 2016/17 was 74%%. This equates to 1,883 children in Reception year; this rate is similar to London (73%) but, higher than England (71%)¹⁷.
- 8.29 Evidence shows that children receiving free school meal (FSM) do less well but, the position is improving. In 2016/17 64% of children receiving FSM achieved a 'good level' of development. This representing a trend of significant and continuous improvement over the past four years from 33% in 2012/13. The 2016/17 figure is similar to London (64%) but, is higher than England (56%). The gap in school readiness between children with FSM status and their peers has reduced to 13% (nationally the gap is 18%)

¹⁶ "School readiness" is a term often used to describe how ready children are socially, physically, and intellectually, to start formal schooling

¹⁷ Public Health Outcomes Framework (PHOF)

- The number of children aged 2, benefiting from funded early years education is 55% (2017), which is lower than overall outer London rate (59%) and England (71%). 28 Although this shows a slight decreased from 2016 (57%); local analysis of 2018 data (not yet published) indicates an overall increase to approximately 65% take up.
- For children aged 3 and 4, the number benefiting from funded early years places increased to 86% of those eligible which is the same as London but lower than England (95%) in 2017.28 Ofsted has rated 92% of early education settings in Merton as 'Good' or 'Outstanding' which is in line with England (93%) but slightly lower than other outer London boroughs (95%).
- Overall 93% of Merton schools are judged by Ofsted to be 'good' or 'better' as at January 2018; this is the strongest performance by Merton schools with regard to Ofsted inspections and is a strong improvement from 81% in 2014. This is in line with the national average and just below the London average. All secondary schools are now judged at least 'good' with 50% as outstanding. Merton has a low rate of 16-17 year olds Not in Education, Employment or Training (NEET) or whose activity is unknown at 3.5%, which is lower than London (5.3%) and England (6%) and is the 7th lowest in London.

Housing

- 8.33 Merton's social housing stock is the fifth lowest in London at 14%. The London average is 20% with social housing stock as high as over 44% in the boroughs of Hackney and Southwark. It should be noted the reason for Merton's low figure is due to the stock transfer of council homes in 2010 to Merton Priory Homes (now known as Clarion Housing Group) The profile of tenure of housing in Merton differs between owner occupied and social housing in Merton, with 58% of social housing and 63% of private rented homes being flats, compared with only 24% in the owner occupied sector.¹⁸
- Average house prices in the borough rose to 51% between March 2013 and March 2016, from £328,435 to £495,205. Although prices have since stabilised with average house price falling by -1% to £491,078 by March 2018. Flats in the cheapest areas in Merton can still be unaffordable to households on an average income, who would need a deposit of around £87,000 and a mortgage of 4.5 times income multiples, or an equivalent amount in equity, to be able to purchase a flat of average price (£267,000) in Mitcham.

¹⁸ 2011 Census

- Average weekly rents in Merton are well above the Local Housing Allowance (LHA) rate, which means that households on benefits will have to cover the shortfall of their housing costs with other benefit income. Private rented sector tenancies can also be insecure and the end of Assured Shorthold Tenancies is the biggest cause of homelessness in Merton.
- Although Merton has the lowest number of homelessness acceptances amongst all London boroughs, homelessness in the borough has been on the increase. Homelessness acceptance had gone up by +34% between 2012/13 and 2016/17. The number of people rough sleeping in Merton has also increased significantly. Many rough sleepers suffer from poor health, with many having support needs for alcohol, drug or mental health issues or a combination of the fore mentioned issues.
- Poor and overcrowded housing causes or contributes to a number of preventable diseases and injuries, including respiratory disease and poor mental health and wellbeing. 15.8% of households are overcrowded in Merton. This is higher in the east of the borough (20.4%) than west (11.1%).7 Low income combined with high energy costs is strongly linked to living in homes that are not heated sufficiently (fuel poverty).

Housing development

8.38 Merton's housing target presently is 411 per annum as set by the Mayor of London by way of the current London Plan.

During 2016/17 434 new homes were built (+23 above the housing target). However the draft London Plan (2018) will see Merton's housing target increase by 30% over per annum to 1,364 (13, 640 for period 2019/20- 2028/29).

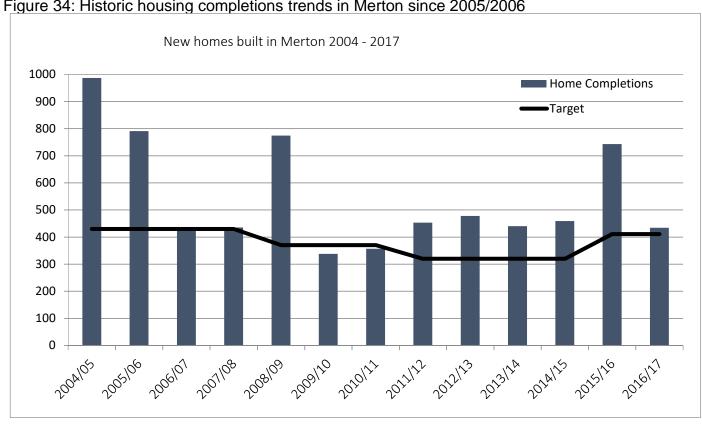


Figure 34: Historic housing completions trends in Merton since 2005/2006

Source: Merton Council, Annual Monitoring Report (AMR)

8.39

During the 2016/17 123 schemes have been completed resulting which equates to 434 new homes. 131 schemes were started during the 2016/17, 80 of which were started but not completed. During 2016/17 74 (17%) additional affordable homes provided during the monitoring period (24% excluding prior approvals).

Figure 35: Affordable homes completed since 2010/11

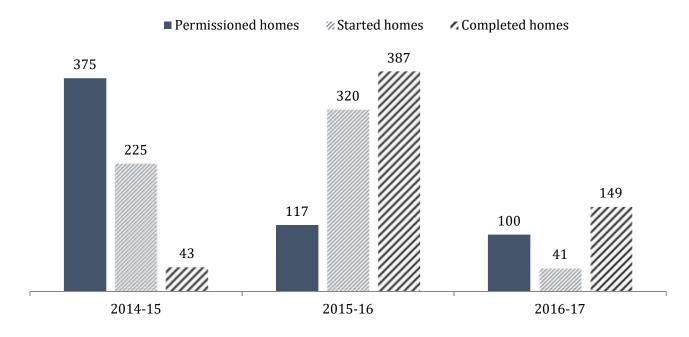
Financial Year	Total Completions	Affordable Home Completions	%	Target	Target	Social Rent	%	Intermed iate	%
2010/11	357	112	31%	179	50%	45	40%	67	60%
2011/12	453	162	36%	181	40%	n/a	n/a	n/a	n/a
2012/13	478	141	29%	191	40%	71	50%	70	50%
2013/14	440	163	37%	176	40%	75	46%	74	45%
2014/15	459	186	41%	184	40%	143	77%	43	23%
2015/16	678	90	13%	271	40%	65	72%	25	28%
2016/17	434	74	17%	174	40%	17	45%	46	55%
Total	3299	928	-	1356	-	416	-	325	-

Source Annual Monitoring Report 2017

In 2016-17 149 new homes were the result of Prior Approvals from office to residential use; 9 new homes were the result of Prior Approvals from storage to residential use; and 7 new homes were the result of Prior Approvals from retail to residential use.

Figure 36: Office to home trends in Merton (prior approval)

Office to homes permissions, starts and completions - units

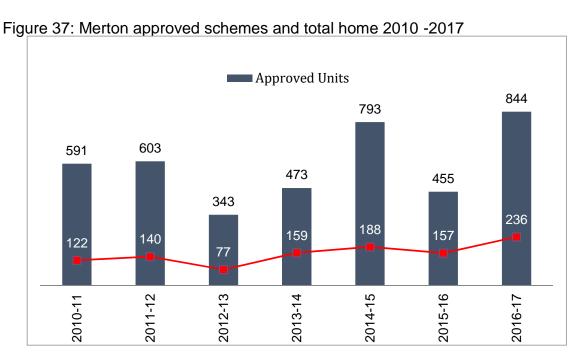


Source Annual Monitoring Report 2017

Up to the 31st October 2017 there were 202 individuals and 5 groups on Merton's Self build and Custom House Build Register. 51 sites have been added to Merton's Brownfield Land Register. These include sites with valid planning permission that have not commenced, sites where planning permission has lapsed, and allocations in Merton's Sites and Policies Plan (2014). The Brownfield Land Register can be found at and via https://maps.london.gov.uk/brownfield-site-register

Housing pipeline

- Merton's housing pipeline currently includes the Morden Housing Zone part of Morden town centre regeneration. Around 1,800 new homes will be built in the area in addition to the public realm improvements and the TfL's plan for a new bus station in Morden.
- Permissions for phase one of High Path Regeneration has come forward (134 homes), the Summerstown (Volante) site (93 homes), the former Thames Water Merton Works (74 homes), and Haig Housing Ex-Service Community (68 homes). Furthermore, other schemes including Pollards Hill Estate MOAT homes are on early planning discussions with residents and the council.

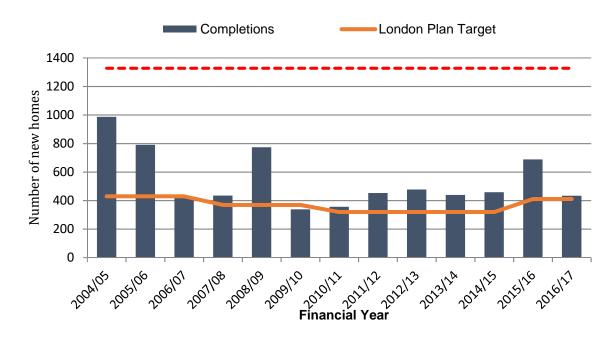


Source Annual Monitoring Report 2017

New London Plan housing target

As mentioned earlier in this section Merton's housing target will be increasing to 1,364 per annum from 411. Despite Merton's pro-growth approach to new homes, even in the strongest economic circumstances, the most homes completed in a single financial year was 987. The council has great ambitions for growth and place making for Merton and will continue to work with the Mayor and other outer London boroughs on a housing target in the new London Plan that is suitably ambitious and deliverable.

Figure 38: Comparison of completions with the current and new London Plan housing targets



Source Annual Monitoring Report 2017

Crime

- According to the 2017 Residents Survey the majority of residents feel safe in their local area both during the day (96%) and after dark (85%). Again, this compares favourably against national benchmarking. Almost all residents (93%) agree that their local area is a place where people from different ethnic backgrounds get on well together. This includes 38% who give the most positive response of definitely agree. Only 2% of all residents disagree that that people of different ethnic backgrounds get on well together
- Furthermore the survey found that Merton residents are satisfied with their local area as a place to live (92%). This is a positive finding and is 12% higher than the national benchmark of 80% (Local Government Authority polling Feb 17). These findings can then be broken down spatially and by gender, age group, and disability.
- During the day, at least 9 in 10 within each of these groups feel safe, including all those interviewed in Dundonald / Trinity / Abbey and Ravensbury / St Helier / Cricket Green; After dark, Mitcham and Morden residents are significantly less likely, compared to Wimbledon, to feel safe (82% cf. 88%). It should be noted that the proportion feeling unsafe is similar for both constituencies (8% cf. 7%). The lower levels of perceived safety in Mitcham and Morden are driven chiefly by responses in Lavender Fields / Pollards Hill / Figge's Marsh, where 78% feel safe and 13% unsafe.
- Female residents are also significantly less likely to feel safe after dark compared to male (80% cf. 90%), with 11% of female residents feeling unsafe at this time. By age group, residents aged 65+ are significantly less likely, compared to the average, to feel safe after dark (79%); however this is driven by a higher volume of 'neither' responses from this group (14%). For each age group, 7% to 8% feel unsafe after dark. Disabled residents are significantly less likely to feel safe after dark compared to nondisabled residents (72% cf. 86%). Whilst this group is also more likely to feel unsafe (13% compared to 7% of non-disabled residents), this difference is not statistically significant.

Figure 39: Crime Rates in Merton (all offences) 2012/13 – 2016/17

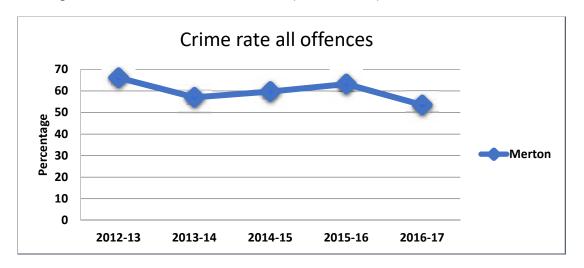
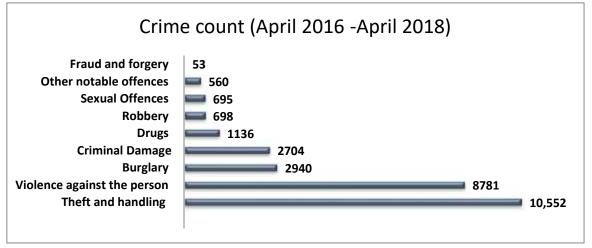
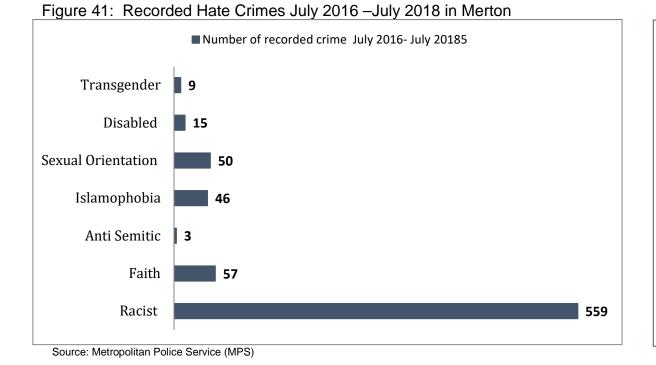


Figure 40: Crime count 2016 – 2018 (financial year)



Source figures 39-40: Metropolitan Police Service (MPS) and the Home Office (March 2017).

- *Offences: These are confirmed reports of crimes being committed. All data relates to "notifiable offences" which are designated categories of crimes that all police forces in England and Wales are required to report to the Home Office –
- ** Numbers of recorded offences, and rates of offences per thousand population, by broad crime grouping, by financial year –
- ***There were changes to the police recorded crime classifications from April 2012. Therefore caution should be used when comparing sub-groups of crime figures from 2012/13 with earlier years.



Please note:

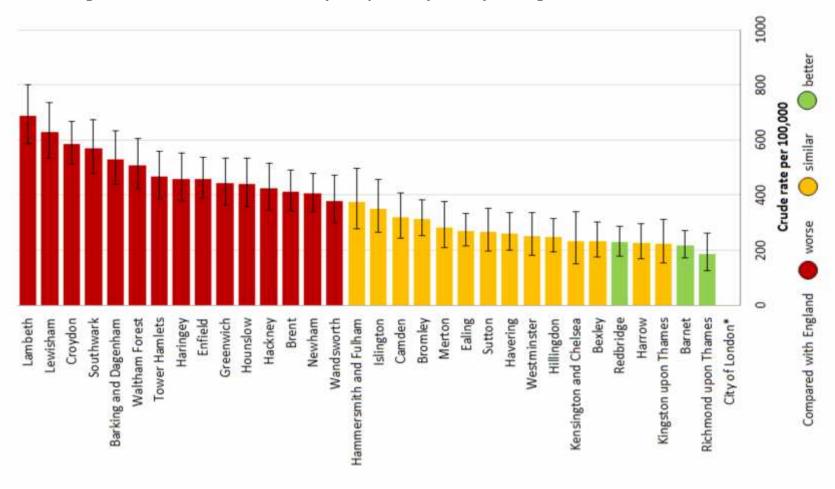
Hate Crimes are calculated to have a very specific meaning therefore none of the hate crime categories should be summed together. Not all definition is included here but, as an example Islamophobia Hate Crime is a subset of Racist and Religious Hate Crime, Islamophobia Hate Crime and Faith Gate Crime. Hate Crime is the overarching category that totals all hate crime offences

First time entrants to the youth justice system

8.49 Children and young people at risk of offending or within the youth justice system often have more unmet health needs than other children. This indicator is included to ensure that vulnerable children and young people (aged 10-17) at risk of offending, are included in mainstream planning and commissioning. Data are collected from the Police National Computer.

- In 2017, London had a significantly higher rate of first time entrants to the youth justice system 380 compared to 293 per 100,000 residents in England.
- The London rate has however fallen by more than half compared to baseline in 2010. Although this decrease had tapered off in recent years the rate for London fell by more than 7% compared to the previous year (2016).
- Only Richmond upon Thames (185 per 100,000), Barnet (218) and Redbridge (228) had a significantly lower rate than England

Figure 42: First time entrants to the youth justice system by borough



* Not calculated due to small numbers

Transport infrastructure

Railway

Merton being located in the south London sub region the borough relies on the rail network more than the underground network for commuting to London and surrounding areas. There are over 11 railway stations found in the borough, all linking to Wimbledon station which is the largest of the station in the borough. The average journey time from Wimbledon to central London (Waterloo Station) is 10-15 minutes.

Underground (tube) and tram

- 8.51 Merton has two underground lines services, the Northern Line and District Line, both terminating in the borough the Northern Line at Morden and the District Line at Wimbledon; with the northern line stations providing night service on Fridays and Saturday's. Both underground lines provide links to central London and other major London railway stations.
- Within Merton a tram service runs from Wimbledon to Croydon, connecting the centre of the borough to the east. The tram service also has interchanges with the rail network at Wimbledon and Mitcham Junction station.

Bus

London Buses are operated by Transport for London (TfL), who manage the bus service in London, plan routes, specify service levels and monitor service quality. London Buses is also responsible for the siting of bus stops and other support services. Merton is served by 29 bus routes, 6 night bus services and 3 24-hour bus services serving the 3 main town centres in the borough.

Public Transport Accessibility Levels (PTAL)

As with other outer London borough Merton has higher PTAL levels near and around the town centre of Wimbledon (PTAL of 6b, excellent), Morden (PTAL of 6a very good) and remaining range from PTAL of 4- 5 (good). Appendix 1 Maps identifies the PTAL in across Merton.

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Figure 43: Merton Public transport network

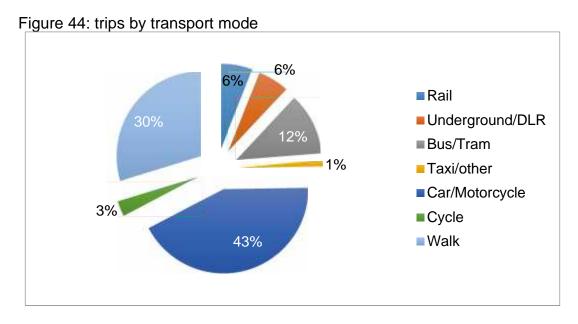
Road network

The vast majority of roads in the Merton are unclassified. However, 30 kilometres of classified 'A' roads, 48 kilometres of classified B and C roads and 10 kilometres of TRLN. Certain roads in the borough have been designed as strategic routes and include major roads, which despite still being the responsibility of the borough, gives additional powers to the Mayor and TfL to work with the council to minimise disruption caused by road works.

- Merton has no motorway only a Trunk Road which is a small section of the A3, which along with the Red Route Network forms part of the Transport for London Road Network (TLRN) and is the responsibility of Transport for London (TfL).
- The vast majority of roads in the borough are unclassified. However 30 kilometres of classified A roads, 48 kilometres of classified B and C roads and 10 kilometres of TRLN. Certain roads in the borough have been designed as strategic routes and include major roads, which despite still being the responsibility of the borough, gives additional powers to the Mayor and TfL to work with local Boroughs to minimise disruption caused by road works.

Transport use patterns

In Merton the number of people who either walking, cycling or use public transport is around 58%, showing a falling trend compared to previous years (down from 61%). Merton's figure is just below the London average of 62%. All trips per day by main mode for the periods from 2014/15 to 2016/17.

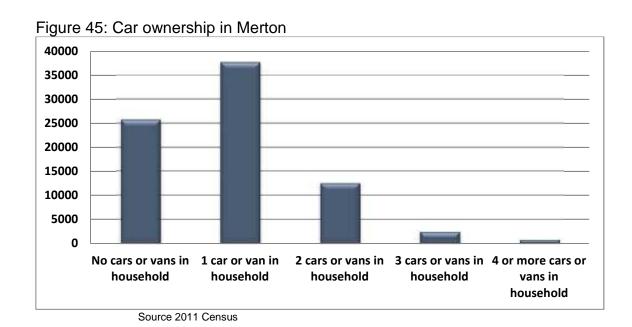


Source 2011 Census

Car ownership

8.60

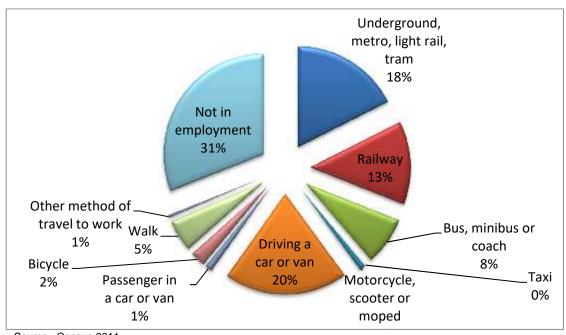
As with other outer London boroughs the private car retains a leading role in meeting travel demand with around 43% of daily trips by car. There are currently around 78,497 cars in Merton or roughly one car per household. Car ownership is up from previous years. The highest car ownership can be found in Village Ward (1.4 cars per household) dropping to 0.7 car per household at the other end of the range. The areas with the highest car ownership generally coincide with areas of poor connectivity



Figures now shows that, an average of 32% of households have no car (2014/15 -2016/17) Local Demand Travel Survey data identified a slight decrease on previous years. However, this has been off-set by an increase in households with 2 or more cars (up to 18.6%).

Travel to work

Figure 46: Mode of travel to work



Source: Census 2011

Many roads are overcrowded during peak periods adding to air quality, noise and road safety concerns. This is perhaps supported by collision data, which suggests that rates are increasing for all vulnerable road user groups and cars for both KSI's and all collisions rising in 2016 compared to 2015 (see figure 4 below). Likewise annual vehicle kilometres travelled is also increasing, albeit slowly.

Figure 47: Number of people killed, seriously injured, and slightly injured in road traffic collisions

		·	2012	2013	2014	2015	2016	2015 - 2016
No of people slightly in	njured		471	481	567	565	579	2%
No of people Killed or	seriously injur	ed	65	32	50	36	44	22%

Source: Merton road safety annual report

9 Economic

Employment and income

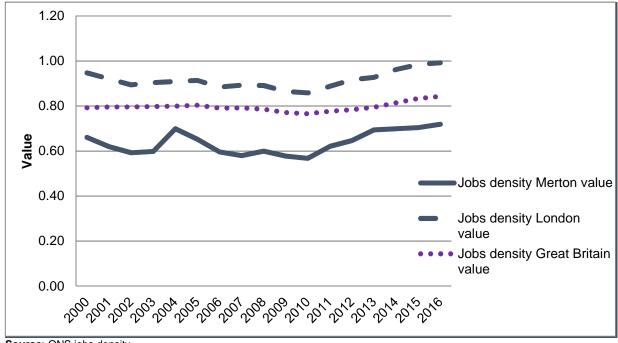
- 9.1 Merton residents who are in active full time employment are distributed all over the borough however, unemployed residents are concentrated towards the east of the borough and self-employed residents tend to be concentrated toward the west of the borough.
- 9.2 Population projections identify a smaller increase in the working age population by 2025 than both the younger and the older populations. This is likely to mean increasing numbers of middle aged people coping with the competing demands of looking after both young children and older parents, as well as having implications for the comparative size of the future health and care workforce.
- 9.3 Merton residents who are in active full time employment are distributed all over the borough however, unemployed residents are concentrated towards the east of the borough and self-employed residents tend to be concentrated toward the west of the borough.

Employment locations

There are 16 designated Industrial areas of which 8 are locally significant Industrial sites and 8 are Strategic sites located throughout Merton. Merton has relatively small supply of employment space compared with neighbouring boroughs of Lambeth and Croydon, but significantly more than nearby outer London boroughs such as Sutton and Kingston.

Merton also has the second lowest amount of office space among adjoining south London boroughs. In common with other boroughs in south London, Merton has experienced a small loss of employment floorspace over the last decade, mainly of manufacturing space with only a small increase in office and warehousing space a trend that mirror a number of borough in London.

Figure 48: Job density in Merton



Source: ONS jobs density

NB: The density figures represent the ratio of total jobs to population aged 16-64.

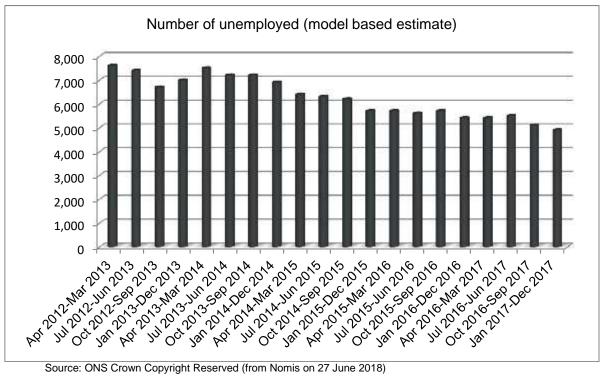
Number of people (16+) in employment 120,000 115,000 110,000 105,000 100,000 95,000 Jan 2014. Dec 2014 or 2014 sep 2015 180 2013 Dec 2013 APT 2013 May 2014 Jul 2013-Jun 2014 Ot. 2013-Sep 2014 ANT 2014, MAY 2015 Jul 2014 Jun 2015 Jan 2015 Dec 2015 APT 2015 May 2016 Jul 2015 Jun 2016 or 2015 sep 2016 Jan 2016: Dec 2016 APT 2016 May 2017 Oct 2012-5ep 2013 111201611112017 or loto see lot Source: ONS Crown Copyright Reserved (from Nomis on 27 June 2018)

Figure 49: 16+ in employment in Merton

- 7.55 The top three industry of employment in Merton are as follows:
 - 16% Admin and service support
 - 14% Wholesale and retail trade and; repair of motor vehicle
 - 12.3% Professional, scientific and technical activities
- According to NOMIS (January –December 2017), unemployment in Merton is at 4%, this figure is lower than the London figure (5.3%) and the national figure (4.4%). However in some wards in the east of the borough it rises significantly furthermore 63% of all benefit claimants live in the east of the borough

Employment rates for disabled people and BAME groups in London are marginally higher than rates for the same groups 9.7 in other parts of the country in 2015, 50% in London compared to 49% in the UK for disable people and 65% London compared to 63% for BAME groups in the UK¹⁹.

Figure 50: Number of unemployed in Merton



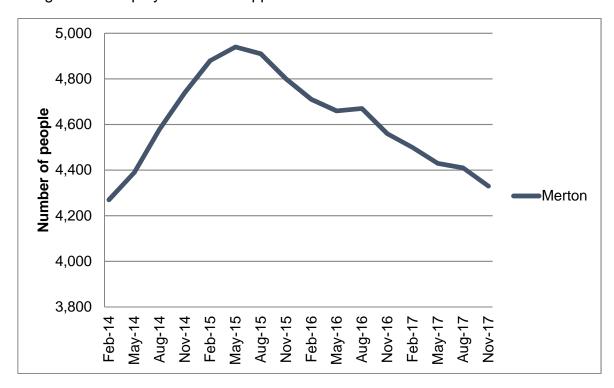
Source: ONS Crown Copyright Reserved (from Nomis on 27 June 2018)

¹⁹ GLA Economics report

- 9.8 ESA is a benefit that could give you some money if you have an illness or disability that affects your ability to work.

 Merton's current rate is 31.6 (as of November 2017) There are two types of ESA:
 - contribution-based ESA you can get this if you've paid enough National Insurance contributions
 - income-related ESA you can get this if you're on a low income, either on its own or in addition to contributionbased ESA

Figure 51: Employment and Support Allowance

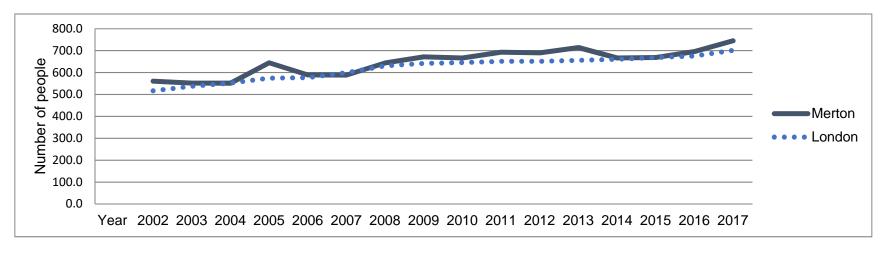


Source: Department of Work and Pension (DWP) Information Directorate: Work and Pensions Longitudinal Study

- 1. Employment and Support Allowance (ESA) replaced Incapacity Benefit and Income Support paid on the grounds of incapacity for new claims from 27th October 2008.
- 2. Employment and Support Allowance, Benefit Caseload. ESA replaced Incapacity Benefit and Income Support paid on the grounds of incapacity for new claims.
- 3. The figures relating to Employment Support Allowance have been thoroughly quality assured to National Statistics standard however it should be noted that this is a new benefit using a new data source which may not have reached steady state in terms of operational processing and retrospection. Hence most recent data shown is provisional.

- Merton's gross weekly pay in November 2017 was £675 this figure is above the London average ((£654.60) and above the national average (£552.70). Although, analysis from GLA Economics suggests that women may appear to be 'disadvantaged' in comparison to men due to individual characteristics and factors which are peculiar to London, such as the significantly higher cost of childcare, transport and more generally, the cost of living which can influence the opportunity cost of women working. The gap of pay between women and men in Merton, mirrors both London and the rest of the country; were as, men are paid more than females.
- 9.10 The difference between under and over employment rates can provide an indication as to the efficiency of the labour market at meeting demands for working more and fewer hours. In London the underemployment rate has exceeded the over employment rate in each year since 2009, peaking at 2.6% when compared to 2013. Suggesting that there has recently been net underemployment in London, meaning there are more workers wanting more hours of work than less; which, could be an indication of slack in the labour market. In contrast there has been net over employment in 2014 and 2015 across the UK as a whole. An impact of net under employment is that individuals are not working to their full capacity





Source: Nomis

NB: Results for 2003 and earlier exclude supplementary surveys. In 2006 there were a number of methodological changes made. For further details go to: http://www.nomisweb.co.uk/articles/341.aspx

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Figure 53: Female Full Time Workers Weekly gross pay (Median)

Source: Nomis - NB: Results for 2003 and earlier exclude supplementary surveys. In 2006 there were a number of methodological changes made. For further details go to: http://www.nomisweb.co.uk/articles/341.aspx

Figure 54: Hourly Pay - Excluding Overtime in Merton's residents

	All	Male	Female
2014	£15.87	£16.17	£15.45
2015	£16.32	£17.17	£15.37
2016	£17.19	£18.03	£15.47
2017	£17.45	£18.62	£16.58

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

NB: Median earnings in pounds for employees living in the area. Results for 2003 and earlier exclude supplementary surveys. In 2006 there were a number of methodological changes made. For further details go to https://www.nomisweb.co.uk/articles/341.aspx

Merton's town centre

- Wimbledon is designation as a 'Major Centre' in the London Plan. Due to its proximity to high quality residential and leisure amenities, good transport links and clustering of similar services and the Wimbledon brand 'SW19' through its association with the Wimbledon Tennis Championship it is clearly preferred to the rest of Merton as a location for office based businesses and global companies head UK based head office.
- The priority for Wimbledon Town Centre is to emphasise and promote its position as one of London's Major Town Centres, by improving the transport interchange, supporting the provision of more office jobs and quality shops, balanced with community, leisure, arts, culture and associated facilities.

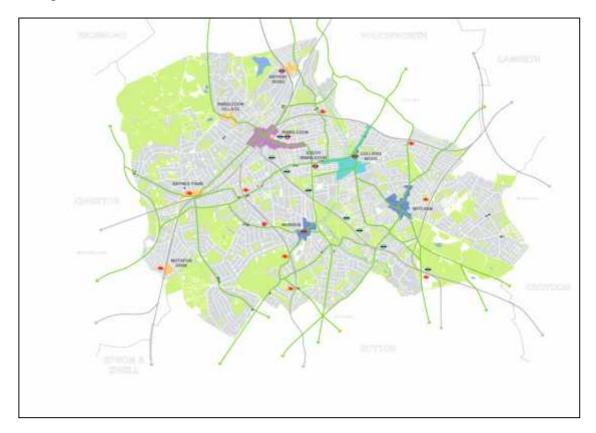
Figure 55: Town Centre Designation in Merton

Local Plan Designation	Town Centres in Merton	
Major Centre	Wimbledon	
District Centre	Mitcham	
	Morden	
	Colliers Wood	
Local Centre	Arthur Road, Motspur Park	
	North Mitcham	
	Raynes Park	
	Wimbledon Village	

- 9.13 Colliers Wood District Centre is situated along the River Wandle, linked by the Wandle Trail and is at the heart of the emerging Wandle Valley Regional Park. It has excellent public transport and road links. Even though it has good transport links it is not pedestrian friendly environment. Much of the area is dominated by out-of-centre retail type developments.
- 9.14 Mitcham District Centre is located to the east of the borough and is served by and connected to rail, tram and bus links.

 However, the tram and train stations are situated a distance away from the town centre. Mitcham has a small proportion of multiple retailers and primarily serves the retail needs of the local residents.

Figure 56: Merton's Town Centre Network



Morden District Centre is located in the centre of the borough and is well placed to provide services and support that responds to changes in the way people work, offering alternatives to central London commuting yet retaining easy access to the city. The perception of Morden is of a place to pass through rather than a place to visit. The majority (74%) of B Use Class employment space in Merton is industrial, with a more modest amount of office space (26%), a significant amount of which is concentrated in Wimbledon Town Centre. In contrast, factory and warehouse space are concentrated in Mitcham and Morden in the south of the borough. There is also a significant amount of non-type B Use Class space that generates employment, although this is harder to quantify.

Local growth

9.16 According to CoStar²⁰, only nine submarkets of the 49 that comprise Greater London are still posting year over year growth. The top 10 submarkets for growth are in the London North West, London South, and London East and North East markets, the three least expensive London markets by average rent. All but one of these submarkets is among the cheapest third in London submarkets. The highest rent still can be found in the central London submarkets area such as Covent Garden. Although the city core submarkets have had rents fall by as much as 6% over the past 12 months. Merton, is still experiencing rent growth with average rents of £33 per sq. ft an increase of +2%. Merton has low vacancies rates of 3%, this rate is low than neighbouring borough of Sutton, who vacancies rates is nearly 5%.

High speed and efficient digital connectivity

- 9.17 Reliable, high quality, fixed and mobile broadband connections are essential to most modern businesses and especially for digital tech and creative companies. High speed internet enables businesses to create new and more efficient business processes, opens up new markets, and supports more flexible working. In future years, demand for high speed connections is likely to grow as businesses and households need to transfer ever greater volumes of data. Ofcom's Infrastructure Report 2014 found that the average download speed for the UK was 23mbps, although speeds available to customers vary considerably. Superfast broadband, speeds greater than 24 mbps is now available in 75% of UK premises, with take-up of 21%. In London average speeds were 27.3mbps, the highest of all UK regions.
- 9.18 For London to be internationally competitive, the Government has set out its ambition of connecting the UK to 'Ultrafast' broadband of 100mbps. In general London provides good access to high speed broadband. However Ofcom postcode data indicates that around 89% of London is able to opt for Superfast Broadband (24Mbps or above). In Merton broadband speed range from 25.7Mbps (Mitcham area) to 42.85 (Wimbledon area). However gaps in provision are more acute in certain parts of Merton.²¹

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http://www.costar.co.uk/

²¹ Mayor of London (2014), London Infrastructure Plan 2050, Connectivity Paper

10 Sustainability issues (Task A3)

- The identification of sustainability issues and problems is an opportunity to define some of the key issues for the new Local Plan to address. There are many possible sustainability issues but not all will be significant for the borough. The issues recorded are those acknowledged as a priority for the borough.
- The sustainability issues confronting the Merton Council have been identified from the following sources:
 - Issues identified in review of plans (Task A1)
 - Analysis of baseline data and trends (Task A2)
 - Knowledge of officers working in the borough including conservation and heritage officers, Lead Local Flood Risk officers. Public Health Merton and environment health.
 - Merton Council's plan and strategies for example the Community Plan and; the Health and Wellbeing Strategy.
 - Previous responses on the SA Scoping Report and preliminary consultation with key organisations such as the Environment Agency, Historic England and Natural England

Figure 57: Sustainability issues

Topic area	Sustainability issue(s)	Likely impact in the absence of a Local Plan
Air quality	High levels of NO_{x_1} PM_{10} , and PM_{25} emissions from road traffic.	With no additional measures to tackle air quality, London will continue to be non-compliant with EU legal limits; with higher levels of exposure to
	London is not meeting legal value for NO ₂ .	harmful pollutants.
	Exposure to poor air quality is unequal across the borough and some parts of the borough more exposed to air quality.	Increasing economic growth and development will lead to increased emissions from construction, buildings car use and congestion leading to localised air quality issues in Merton.
	Transport is likely to continue to contribute to CO2 emissions	Climate change effects will continue to increase and occur more often, such as increased temperatures, droughts, severe storms and other
	CO2 emissions from buildings likely to continue to rise	extreme weather events and; flooding seen in the recent years.
Climate change	Increase in extreme weather events such as flooding, drought, heat exposure and associated adverse health risks to population and potentially pressures to health services.	
	Growing ageing population and increase in children may lead increase in vulnerable population.	
	Design of building causes a larger variation in temperature exposure than the Urban Heat Island (UHI) effect	
Energy use and supply	Insufficient low carbon energy supply.	Without additional measures energy use is likely to increase having an adverse impact to in
	High number of Merton residents living in fuel poverty.	creating a more sustainable borough.

Water recourse and quality	Need to reduce water usage and consumption per capita.	Increase demand for water and deterioration of water quality.
Flood risk	Risk of flooding to property and people from river, surface water, sewer, groundwater and reservoir. Increase in run-off, potential contamination and disruption of flows.	Without additional measure to prevent development in areas of flood risk and mitigate against increasing flood risk, the number of people/properties at risk will increase.
Nature environment (Biodiversity/open space).	The loss of biodiversity and reduced ecological resilience as a result of increased pressure for development and intensification of existing development. Impact of climate change and threat of new pest and diseases. Poor connectivity to green infrastructure.	The increase of development pressure will reduce the amount of green space and reduce the quality of existing green spaces with no funding or investment.
Historic Environment (Heritage, architectural and archaeological heritage)	Heritage assets at risk from neglect, decay, inappropriate development and air pollution. Pressure of development on the settings and surrounding area of heritage assets.	Heritage assets likely to be protect by way of legislation, however the environment will continue to be most at risk from increased pressure development.
Design	Poor quality public realm Poor design of the built environment, not adopting an inclusive design approach from the outset. Risk of poor design, lack of legible neighbourhoods and sense of place.	Design challenges for Merton's built and natural environments may not be consistently addressed.
	Non efficient use of land. Lack of land for housing development to meet Merton's housing needs.	Pressures from development and competition between the types of development uses will increase, which may lead to unsustainable patterns.

Sustainable land use	Higher density development.	
	Competing pressures for land will impact on the ability to provide social infrastructure and green infrastructure.	
	Integration of land use and transport.	
Soil and geology	Threat to geodiversity as a result of increased demand for development.	Greater impact on geology and soils from development.
Soli and geology	Remediation of contaminated land	Innovative solutions to reduce the impact of the cost of remediation are also needed.
Noise	Increased noise from night time economy, freight movement and deliveries associated with mixed used developments.	Likely increase of the population exposed to noise and noise related activities.
	Increase in Merton's population.	Such increases in population likely to lead to increased pressure and competition for land for
Demographic change	Growing ageing and diverse populations.	different types of development.
	Uncertainty of the composition of the population, including migration patterns.	
	Increased aging population	Benefits /dis-benefits of growth are likely to affect groups of people differently, especially vulnerable
Social Integration	Remaining causes of multiple deprivation.	communities.
J	Ageing population may lead to more isolation/c	
	Lack of cohesion.	
		J.

	Risk of poor design, a lack of legible neighbourhoods and a sense of place.	
	Increased health inequalities across the borough, especially wards in the east of the borough.	Obesity is a growing problem in Merton; problem is significantly worrying in the east of the borough.
	Increase pressures on the health service and service provisions.	Increased pressures on the health sector to deal with complex health needs.
Health and health inequalities	Differences in life expectancy in east of the borough and diverse communities.	
	Widening social inequalities.	
	Low levels of physical activities in children and adults and some diverse communities. Increasing child obesity	
	Perception of lack of safety.	Social isolation of some groups are likely to increase as their fear if crime or anti-social
Crime and safety	Fear of crime is creating a barrier to activities for some communities.	behaviour will make them more reluctant to go out and use facilities, services including libraries, shops, green spaces or use public transport
	Vulnerably of different groups (for example BAME groups and Protected characteristic groups).	
	More vibrant night-time economy may lead to an increased fear of crime.	
Housing	Lack of affordable housing	Challenges to meet housing demands in Merton (including requirements size, type tenure) are
	Lack of housing meeting local needs/under supply	likely to increase.
	Increase in homelessness.	

	Variations in educational achievement and attainment across the borough	Inability to access high paid jobs may have a significant impact on people from deprived areas, BAME groups and women.
Education and skills	Lack of support for transition from education to work	
		Increase in the levels of social deprivation and poverty
	Disparities between the east and west of the borough in types of jobs available or occupied by population in part of the borough.	Disparities between wages and cost of living and lack of diversity in jobs could impact on Merton's economic growth and stability.
Local employment	Disparity between wages and the cost of living	
		Ability to attract a flexible and diverse work force
	Lack of diversity in jobs available across the borough	
	Increased pressure infrastructure due to economic	Without investment in
	growth	Merton's infrastructure and land use policies to ensure the sufficient provision of employment and
	Lack of high speed and efficient digital connectivity in some part of the borough.	business spaces (type, location and cost), Merton cannot have a sustainable local economy. This is likely to threaten Merton's growing local economy,
	Loss of employment land as a result of housing supply pressures.	job creation and continuous sustainable growth. All of which will have a direct adverse impact to local populations.
	Insufficient floorspace to meet needs	local populations.
Economic growth	·	
	Lack of affordable business space for small and medium size businesses and start-ups.	
	Adverse impact on town centres as a result of reduction in demand for floorspace.	

11 Developing sustainable objectives and framework (Task A4)

Figure 58: sustainable objectives

Topic SA	area SEA (SEA Regulations 2004 Schedule 2 [(6])	Sustainable objectives	Objective aim
	Air	Air quality	To reduce emissions and concentrations of harmful atmospheric pollutants, particularly in areas of poorest air quality and reduce exposure.
Environment	Biodiversity, flora and fauna	Biodiversity	To protect and conserve Merton's biodiversity from adverse development, avoid damage and irreversible losses to designated sites and protected species, adding to the abundance of non-designated biodiversity features and habitats (such as trees, gardens, green roofs and other features).
	Soil	Land and soil condition and pollutants	To conserve Merton's geodiversity and protect soils from development and over intensive use.

	Sustainable land use	To make the best and most efficient use of land so as to support sustainable patterns and forms of development.
Cultural heritage, including architectural and archaeological heritage	Heritage (including architectural and archaeological heritage)	To conserve and enhance the existing historic environment, including sites, features, landscapes and areas of historical, architectural, archaeological and cultural value in relation to their significance and their settings.
	Flood risk management	To manage the risk of flooding from all sources and improve the resilience of people and property to flooding.
climatic factors	Climate change	To help tackle climate change through reducing greenhouse gas emissions and moving towards a zero carbon London by 2050.
	Noise and vibration	To minimise noise, vibration levels and disruption to people and communities.
Water	Water quality and consumption	To protect and enhance Merton's water bodies.
		Ensuring that Merton has a sustainable water supply, drainage and sewerage system.
material assets	Open space and nature	To protect, connect and enhance Merton natural environment (including important habitats, species and landscapes) and the services and benefits it provides, delivering a net positive outcome for biodiversity

	climatic factors	Sustainable transport modes	To enhance and improve connectivity for all and increase the proportion of journeys made by sustainable and active transport modes.
		Energy use	To improve energy efficiency in new developments
			Increase renewable energy supply / provision
		Health and well being	To facilitate and improve the health and wellbeing of the population, reduce health inequalities and deliver safer and more secure communities.
Social	Human health	Housing	To provide type, quality and tenure of housing (including specialist and affordable provision) to better meet Merton's demographic change and local housing demand
		Safe environments	To contribute to safe and secure environments for all people including the 9 Protected Characteristics ²² .
		Population demands and growth	To ensure that provision of environmental, social and physical infrastructure is managed and delivered to meet population and demographic change in line with sustainable development and to support economic competitiveness.

²² Protected characteristics are the nine groups protected under the Equality Act 2010 age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity; race religion or belief, sex and sexual orientation

	Population	Social inclusion and cohesion	To ensure Merton has socially integrated communities which are strong, resilient and inclusive. To ensure that provision of environmental, social and physical infrastructure is managed and delivered to meet population and demographic change in line with sustainable development and to support
	(the inter- relationship between the issues)	Design	economic competitiveness. To create attractive, mixed use neighbourhoods, ensuring new buildings and spaces are appropriately designed and accessible, which promote and enhance a sense of place and distinctiveness, reducing the need to travel by motorised transport
	Human health	Local employment	To develop and maintain a healthy labour market
Economic	Human health	Education and skills	To ensure the education and skills provision meets the needs of Merton residents existing and future labour market and improves life chances for all, including people with disabilities and BAME groups.
	N/A	Economic growth and town centres	To increase the vitality and viability of existing town centres, local centres and parades

12 SA Assessment Framework and Decision Making Criteria

Figure 59: SA framework and decision making criteria

Sustainability Objectives	Decision making criteria	Assessing of Local Plan Policies
Air quality To reduce emissions and concentrations of harmful atmospheric pollutants, particularly in areas of poorest air quality and reduce exposure.	Will it impact on locations that are sensitive to air pollution?	Analysis of: The whole borough is an Air Quality Management Area
Biodiversity To protect and conserve Merton's biodiversity from adverse development, avoid damage and irreversible losses to designated sites and protected species, adding to the abundance of non-designated biodiversity features and habitats (such as trees, gardens, green roofs and other features).	 Will it impact on national, regional or local BAP habitats and/or species? Does it affect a site designated for nature conservation purposes? Will it impact on access to nature? Does it support ecosystems and lead to any enhancements in biodiversity, particularly in non- designated sites? Will it impact on existing networks of open spaces and create new green spaces? Will it lead to a degradation or fragmentation of the green spaces? 	Analysis of: J Sites designated for nature conservation purposes, including SSSI and SINC D Existing on-site habitats and biodiversity
Land and soil condition and pollutants To conserve Merton's geodiversity and protect soils from development and over intensive use.	Will it safeguard soil quality and quantity? Does it support ecosystems and lead to any enhancements in biodiversity, particularly in non- designated sites?	Analysis of: \[\int \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

	Will it impact on existing networks of open spaces and create new green spaces?	
Sustainable land use To make the best and most efficient use of land so as to support sustainable patterns and forms of development.	Does it make a positive impact? Does it support positive sustainable patterns? Will it bring disused sites into use, which benefits local residents?	Analysis of: Existing use and buildings Vacant site Derelict site Potential options for future land uses
Heritage (including architectural and archaeological heritage) To conserve and enhance the existing historic environment, including sites, features, landscapes and areas of historical, architectural, archaeological and cultural value in relation to their significance and their settings.	 Will it affect the significance of heritage assets through direct impacts or impacts on their setting? Will the design enhance the local character? Have opportunities that make a positive contribution to the local character and area been identified? Will it impact on any potential archaeological remains? 	Analysis of: Historic Parks and Gardens Conservation Area(s) Listed Building(s) Archaeological Priority Area
Flood risk management To manage the risk of flooding from all sources and improve the resilience of people and property to flooding.	 Will the proposal be affected by flooding, i.e. is it within zone 2, 3a or 3b? Will it lead to increased surface water flooding? Will it lead to sewer flooding? Will it impact or increase the risk of flooding to other people and property? Will it promote and include climate change adaptation measures? 	Analysis of: Location within flood zone Surface water maps Localised flooding maps, where available

Climate change	Will it promote and include climate	Analysis of:
To help tackle climate change through reducing greenhouse gas emissions and moving towards a zero carbon London by 2050.	change adaptation measures?	Existing use and buildings Potential options for future land uses
Noise and vibration To minimise noise, vibration levels and disruption to people and communities.	Will it impact on locations that are sensitive to noise pollution?	Analysis of: Existing use and buildings Potential options for future land uses
Water quality To protect and enhance Merton's water bodies.) Will it impact on water quality?	Analysis of: Existing use and buildings Potential options for future land uses
Water consumption Ensuring that Merton has a sustainable water supply, drainage and sewerage system.	Will it impact on water quality?Will it lead to increased surface water flooding?Will it lead to sewer flooding?	Analysis of: Existing use and buildings Potential options for future land uses
Open space and nature To protect, connect and enhance Merton natural environment (including important habitats, species and landscapes) and the services and benefits it provides, delivering a net positive outcome for biodiversity	 Will it increase or decrease public open space deficiency? Will it lead to loss or degradation of designated spaces such as MOL Will it improve connectivity between existing open spaces? 	Analysis of: Existing use and buildings Metropolitan Open Land Historic Parks and Gardens
Sustainable transport To enhance and improve connectivity for all and increase the proportion of	Will it increase access to essential services?Will it assist in improve health and wellbeing?	Analysis of: Area of relative disadvantage

journeys made by sustainable and active transport modes.		Town Centre Boundary Public Right of Way
Energy use To improve energy efficiency in new developments Increase renewable energy supply / provision	Will it improve and reduce energy use?Will it lead to more energy efficient uses?	Analysis of: Existing use and buildings Potential options for future land uses
Health and well being To facilitate and improve the health and wellbeing of the population, reduce health inequalities and deliver safer and more secure communities.	Will it reduce the health inequalities in areas of poor health?Will it improve mental health and wellbeing?	Analysis of: // Areas of deprivation and inequalities // Potential options for future land uses
Housing To provide type, quality and tenure of housing (including specialist and affordable provision) to better meet Merton's demographic change and local housing demand	 Will it increase the number of homes? Will it increase the number of affordable homes? Will it reduce the number of unsuitable/unfit homes? Does it achieve Lifetime Homes Standard and increase accessibility for wheelchair users? 	 Existing use and buildings Potential options for future land uses Conservation Areas Public Health plans and strategies Wider determinates of health Areas of deprivation
Safe environments To contribute to safe and secure environments for all people including the 9 Protected Characteristics.	Does it follow Security by Design principles?Will it contribute to a reduction in the actual crime level?	Analysis of: / Areas of deprivation and inequalities / Potential options for future land uses

Population demands and growth To ensure that provision of environmental, social and physical infrastructure is managed and delivered to meet population and demographic change in line with sustainable development and to support economic competitiveness.	 Will it contribute to a reduction in the fear of crime Will it reduced the levels of socio economic inequalities? Will it ensure that developments such as housing and essential services meet demographic demands and growth? Will it provide sustainable development that will reduce inequalities? 	Analysis of: // Areas of deprivation and inequalities // Local services/essential services // Predicted population projections // Public Health England health profiles
Social inclusion and cohesion To ensure Merton has socially integrated communities which are strong, resilient and inclusive.	 Does it follow Security by Design principles? Will it contribute to a reduction in the actual crime level? Will it contribute to a reduction in the fear of crime Will it reduce deprivation? 	Analysis of: Disadvantaged areas/inequality
Design To create attractive, mixed use neighbourhoods, ensuring new buildings and spaces are appropriately designed and accessible, which promote and enhance a sense of place and distinctiveness, reducing the need to travel by motorised transport.	 Does it follow Security by Design principles? Will it contribute to a reduction in the actual crime level? Will it contribute to a reduction in the fear of crime? Will it reduce the use of the car? Will it assist in building strong communities? 	Analysis of: Disadvantaged areas/inequality Potential options for future land uses
Local employment	Will it lead to the creation of jobs?	Analysis of:

To develop and maintain a healthy labour market		Employment data from NOMIS Employment use Disadvantaged areas/inequality
Education and skills To ensure the education and skills provision meets the needs of Merton residents existing and future labour market and improves life chances for all, including people with disabilities and BAME groups.	 Will it impact on the local economy? Will it lead to local economic growth? Does it provide jobs? Will it increase employment opportunities? Will it increase training and skilled employment? 	Analysis of: Employment use Disadvantaged areas/inequality
To increase the vitality and viability of existing town centres, local centres and parades.	 Will it improve business development? Will it impact on the local economy? Will it lead to local economic growth? Does it provide jobs? Will it meet local business needs? Will the site/land use include commercial development? 	Analysis of: Employment use Town Centre Boundary Area of Mixed Use

13 Appraisal methodology

- Several pieces of guidance have been issued in relation to SA/SEA and the methodologies outlined in these have been used where still applicable:
 - Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents, Office of the Deputy Prime Minister (November 2005)
 - Practical Guide to the SEA Directive, Office of the Deputy Prime Minister (September 2005);
 - Sustainability Appraisal Planning Policy Manual, Planning Advisory Service (2009); and
 - Sustainability Appraisal: advice note, Planning Advisory Service (2010).
- The guidance requires that a Scoping Report is produced to set the baseline, identify Sustainability Objectives and provide the Sustainability Appraisal Framework. The SA finding for Local Plan policies, site allocations and designations will be assessed against the SA objectives using a using colour coded matrix as shown in figure X below.

Figure 60: SA scoring matrix

Symbol	Meaning
++	Significant Positive Effect on Sustainability Objective (normally direct)
+	Minor Positive Effect on Sustainability Objective (normally indirect)
0	No Significant Effect on Sustainability Objective
-	Minor Negative Effect on Sustainability Objective (normally indirect)
	Significant Negative Effect on Sustainability Objective (normally direct)
?	Uncertain Effect on Sustainability Objective

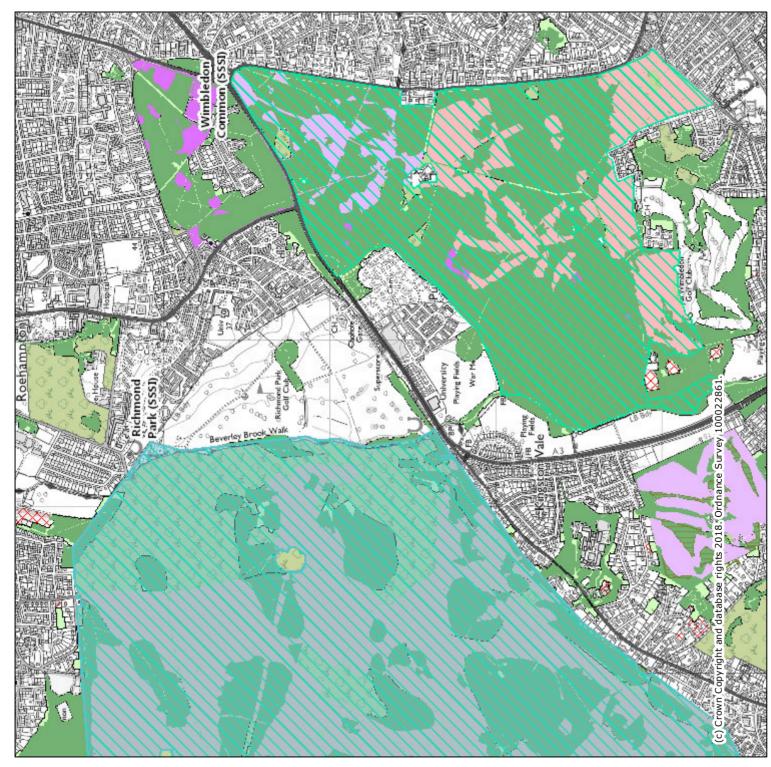


Appendices

Appendix 1 Maps



Wimbledon SSSI







xmin = 517400ymin = 170400

Projection = 0.8GB36

xmax = 526100

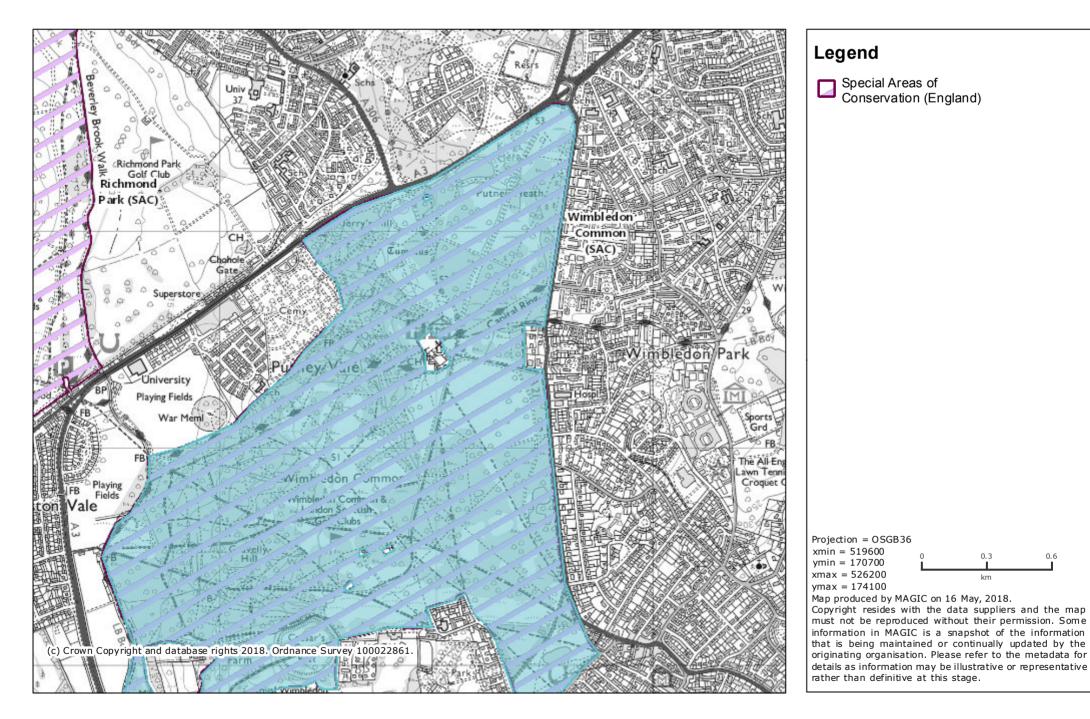
ymax = 174900

Map produced by MAGIC on 8 June, 2018.

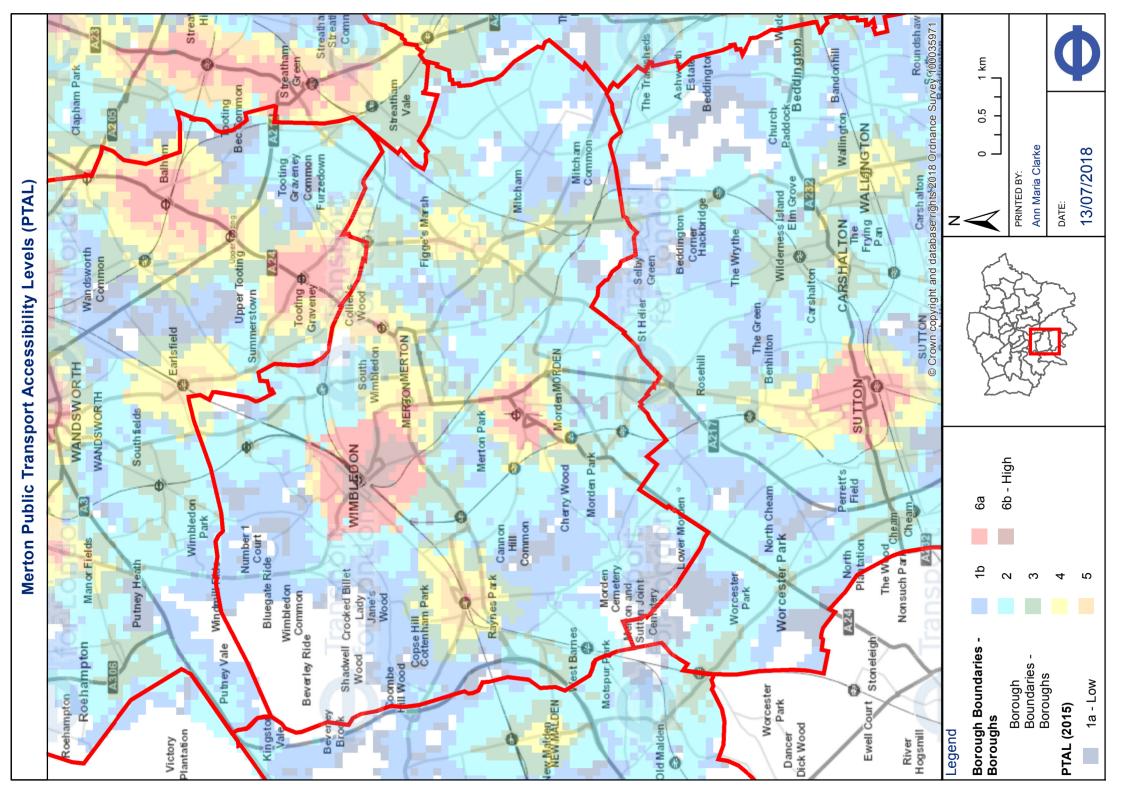
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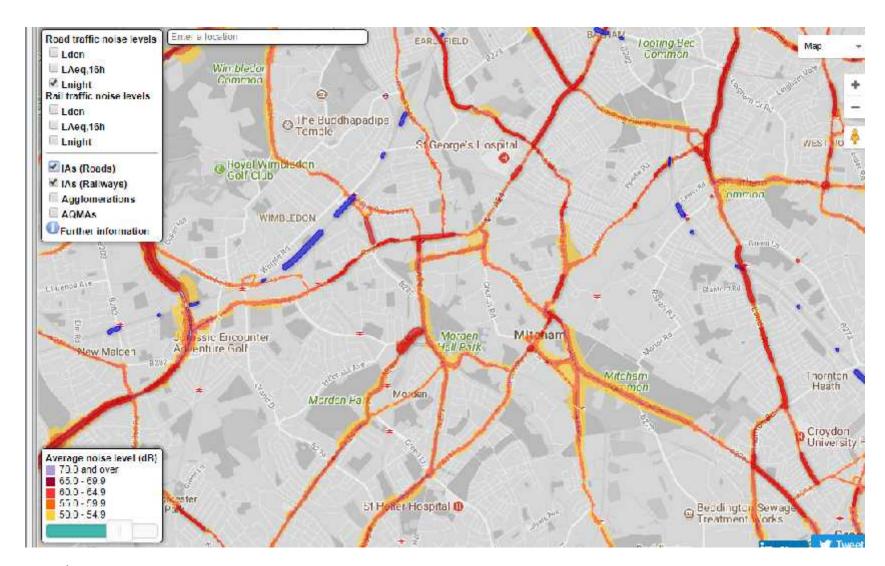


Wimbledon SAC









Source: TfL