



Guildford Borough Council

Air Quality Strategy 2017 – 2022

November 2017

Executive Summary

This strategy identifies the key air quality issues within our Borough and our approach to maintaining and improving air quality. To achieve this, the Action Plan sets out the actions we will take between 2017 and 2022 to help reduce concentrations of air pollutants and exposure to air pollution.

Foreword

Clean air is essential to the quality of life and good health of everyone who lives, works in or visits our Borough and we are committed to protecting and improving air quality for the benefit of current and future generations.

Minimising air pollution levels will bring lasting benefits, with positive effects on public health, economic development, and population wellbeing.

Only by working collaboratively both across the Council, with external partners and our community can we bring about meaningful improvements in air quality. Partnership working is therefore very much at the heart of this strategy.

We outline how we plan to tackle air quality issues within our control, however, we recognise that there are a large number of policy areas outside of our influence, such as vehicle emissions standards agreed in Europe. We will therefore continue to work with regional and central government on policies and issues beyond our direct influence.

This air quality strategy will contribute to Guildford becoming a healthier, more sustainable, prosperous and desirable place to live, work and visit.

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1.0 Introduction

The health and environmental impacts of poor air quality are well documented, with air pollution affecting mortality from cardiovascular and respiratory conditions including lung cancer.

It particularly affects the most vulnerable in society, children and older people, and those with heart and lung conditions, and there is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas.

The annual health cost to UK society of the impact of particulate matter alone is estimated to be around £16 billion.

The Department for Food and Rural Affairs has notes, 'estimates include that air pollution reduces life expectancy in the UK by an average of six months'.

We have developed this strategy having regard to our own strategic plan objectives, our legal duty to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environmental Act 1995 and relevant regulations and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

Our aim is to deliver and encourage practical actions to achieve overall improvements in air quality and not merely to meet pollutant levels set in legislation and guidance.

2.0 The Borough

The Borough of Guildford, centred on the town of Guildford, has a population around 136,000, approximately half of which live within the urban area.

The main source of emissions is from motor vehicles and therefore our focus is predominantly on monitoring levels of Nitrogen dioxide and particulates.

Four major roads pass through the Borough. The M25 enters the Borough briefly at Wisley at its junction with the A3. The A3 runs from north to south passing through Guildford town and linking with the A31. The A31 joins the A331 Blackwater Valley relief Road which connects to the M3.

Guildford is a University town, with a strong educational and research base. The College of Law, Guildford College and Academy of Contemporary Music are located in the town and the Royal Surrey County Hospital and Research Park are also major transport destinations.

There are also a number of large companies with a base in the town.

Guildford town is located on the River Wey forms the centre of the Borough with a number of transport routes converging onto the one-way system in the town.

Land use is predominantly residential, with a number of light industrial areas. To date there is no record of any significant air quality impact from these locations.

Smoke Control Areas covering approximately 12 square kilometres of the urban area were established in the 1960's. These areas are still operational and subject to statutory controls.

3.0 Policy Context

3.1 The Council's Strategic Priorities

3.2 Local Plan

Air quality is a consideration in a number of our planning policies and those of our partners. Key policies are:

Guildford Borough Council

1. Guildford Borough Transport Strategy, June 2017
<http://www.guildford.gov.uk/newlocalplan/CHttpHandler.aspx?id=24636&p=0>
2. Town Centre Regeneration Strategy, January 2017
<https://www.guildford.gov.uk/article/20314/Town-Centre-Regeneration-Strategy>

3. Air Quality Review of Guildford Borough Proposed Submission Local Plan: Strategy and Sites, June 2017

<http://www.guildford.gov.uk/newlocalplan/protectinganddesign>

4. Guildford Development Strategy

Surrey County Council

5. Surrey Transport Plan, Strategy Summary, January 2017

https://www.surreycc.gov.uk/data/assets/pdf_file/0003/109758/STP-Strategy-Summary-Jan17.pdf

6. Surrey Transport Plan – Air Quality Strategy, January 2016

https://www.surreycc.gov.uk/data/assets/pdf_file/0020/90254/Air-Quality-Strat-15th-Update-rebranded.pdf

3.3 Health and Wellbeing

Air Quality is a priority within the Guildford Health and Wellbeing Strategy and is also included within the Surrey Joint Strategic Needs Assessment (JSNA).

3.4 Air Quality Monitoring and Assessments

We publish Annual Air Quality Review and Assessments, which assess compliance with national air quality objective levels. These commenced in 2000 and until 2014 concluded there was no requirement to declare an Air Quality Management Area. Previous automatic monitoring for both particulate matter (PM₁₀) and nitrogen dioxide (NO₂) monitoring provided data to demonstrate that exceedance of the objective values was highly unlikely.

The Annual Status Report (ASR) 2016 considered air quality monitoring data over the calendar years 2014 and 2015. Levels of Nitrogen Dioxide (NO₂) were measured against national objectives. With the exception of one site, there were no exceedances of either the short or long-term NO₂ objective value at any site with relevant exposure.

One Air Quality Management Area has been declared at a small site in Compton.

Defra, through their air quality model, have identified a section of the A331 which is likely to exceed the objective level of NO₂. We have been awarded funding to investigate this further and are working with both Rushmoor and Surrey Heath Borough Councils and Surrey and Hampshire County Councils.

Addressing air quality issues related to traffic emissions requires the co-operation of Surrey County Council (SCC), Highways Agency (HA) and the Environment Agency as the responsible authorities for road infrastructure.

We are part of the Surrey Air Alliance Group, where all eleven districts work with SCC to address the Surrey Air Quality Strategy 2016. One of the main tasks is to map levels of PM2.5 throughout the county.

4.0 Our Approach and Priorities

4.1 Our Approach

We recognise that addressing air quality requires a cross service and organisational approach.

A key aim is therefore to establish and maintain good working relationships with key stakeholders within our Borough to achieve our air quality objectives. In particular to:

- Protect the health and well-being of the population.
- Complement and co-ordinate the actions required in Air Quality Management Areas (which may be declared) to improve air quality.
- Provide a framework for action to improve air quality in Guildford.
- Ensure that, wherever possible, our actions do not have an adverse effect on air quality or climate change.
- Complement other countywide and local strategies adopted and supported by local authorities
- Promote action to minimise the deterioration of air quality.
- Work with the community to help facilitate a modal shift in transport and travel patterns.

4.2 Our Key Priorities

1. A clear approach to air quality

- a. This Air Quality Strategy and Action Plan set out our clear approach to air quality and form the basis of future actions and initiatives.
- b. Respond to Defra consultation Draft UK Air Quality Plan and investigate as to whether a Clean Air Zone is required.

2. Monitoring and reporting of air pollution levels

- a. Maintain and where necessary expand our nitrogen dioxide passive diffusion tube monitoring network.
- b. Explore the use of new technology air quality monitoring equipment in collaboration with the University of Surrey.
- c. Explore the link between Pm2.5 and public health by carrying out a modelling exercise across Surrey.

3. Reducing vehicle emissions

- a. Reduce emissions from the Council's vehicle fleet and encourage businesses and other organisations to do the same.
- b. Work with transport providers including buses and taxis to reduce vehicle emissions.
- c. Work in partnership to facilitate the provision of efficient electric vehicle charging for a wider part of the community and business.
- d. Promoting anti-idling at junctions, traffic lights, schools and level crossings.
- e. Promoting travel alternatives such as walking and cycling.
- f. Facilitating local car clubs.

4. Working with other agencies

- a. Collaborate with Public Health England, SCC Public Health and Guildford Health and Wellbeing Board to ensure that air quality improvements is a priority.
- b. Collaborate with Highways England and SCC Highways teams and seek local improvements through the Guildford Transport Strategy.

5. Planning Framework

- a. Ensure that the Local Plan process takes account of any relevant findings within air quality investigations or modelling.
- b. Provide guidance via SCC for developers to ensure that air quality is sufficiently addressed at the pre application phase.

6. Reducing emissions at source

- a. Ensure that permitted processes are compliant.
- b. Promoting low emission plant.
- c. Restrict appliances and fuels within smoke control areas exist in the Guildford urban zone.

7. Public Information

- a. Work with the community through public health awareness to achieve behavioural change to lower emissions and reduce exposure to air pollution.

5.0 Monitoring and review

We will review this Strategy at least every five years.

Progress on delivering the Action Plan will be reported annually to the Overview and Scrutiny Committee and within our published Annual Strategic Review (ASR).

6.0 Acknowledgements

The contributions and commitments from the following individuals and services have been instrumental in the development of this strategy and action plan:

- Lead Member for Housing and Environment
- Air Quality Monitoring Executive Working Group

- Neighbourhood and Housing Management Services
- Fleet and Waste Services
- Major Projects
- Planning Services
- Parking Services
- Economic Development
- ICT Services
- Policy and Development
- Legal Services
- Human Resources
- Financial Services
- Revenue and Payments Services

7.0 Glossary of Terms

Abbreviation	Description
AQSAP	Air Quality Strategy and Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
GBC	Guildford Borough Council
LAQM	Local Air Quality Management
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
SCC	Surrey County Council

8.0 References

- 1 The Mortality Effects of Long-Term Exposure to Particulate Air Pollution in the United Kingdom – COMEAP 2010
- 2 Estimating Local Mortality Burdens Associated with Particulate Air Pollution – Public Health England 2014

Appendix 1: Air Quality Action Plan Measures

Key

	Initiative type
	<u>Guildford Borough Council – existing project</u>
	<u>Guildford Borough Council – new</u>
	<u>Guildford Borough Council and partner - existing project</u>
	<u>Guildford Borough Council and partner – new</u>

Measure No.	Measure	EU Category	EU Measure Classification	Lead Department	Implementation Phase	Key Performance Indicator	Costs	Progress to Date	Estimated Completion Date	Comments
Short term (2017-2018)										
1	Air quality is considered at pre-application and application stage to allow effective use of planning conditions.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Planning Services and Environmental Health	2017		Within current resource	Service Level Agreement between Planning Development and Environmental Health from March 2017 with quarterly monitoring meetings.	ongoing	
2	Work with other local authorities, land managers, and highway authorities to develop a framework to monitor forecast improvements in roadside air quality around the Thames Basin Heaths Special Protection Area to confirm that forecast improvements are being delivered and, if required, to identify and deliver supplementary measures.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Environmental Health and Planning Services and	Ongoing	Establishment of a framework for monitoring forecast improvements in roadside air quality	Within current resource		2019	

Measure No.	Measure	EU Category	EU Measure Classification	Lead Department	Implementation Phase	Key Performance Indicator	Costs	Progress to Date	Estimated Completion Date	Comments
3	Green scheme parking fees for electric vehicles in GBC car parks	Traffic Management	Emission based parking or permit charges	Parking Services	2016			Owners of electric vehicles can apply for a parking permit to obtain reduced fees.	ongoing	Additional charging points to be installed in GBC car parks. https://www.guildford.gov.uk/carparks
4	Parking App to direct users to closest and cheapest spaces	Traffic Management	Other	Parking Services	2016			App is available to download and aims to reduce congestion and queuing	ongoing	https://www.guildford.gov.uk/parkingapp
5	Education in communities to change behaviours	Promoting Travel Alternatives	Promotion of cycling, Promotion of walking, Workplace Travel Planning	Community Development and Environmental Health	Ongoing		Within current resource	Project Aspire initiatives to reduce dependency on cars and educational programmes in schools	ongoing	
6	Bringing services to the communities to reduce car journeys	Promoting Travel Alternatives	Other	Community Development and Community services	Ongoing		Within current resource	Project Aspire encouraging partners to increase use of local facilities within communities to reduce journeys	ongoing	
7	GBC Air Quality Strategy	Policy Guidance and Development Control	Other policy	Environmental Health	2017	Strategy adopted by Executive November 2017	Within current resources	Strategy produced in consultation with all Council Services and relevant partners	2017	Implementation of action plan to be monitored by Executive Working Group on Air Quality
8	Declaration of Air Quality Management Area in Compton	Traffic Management	Other – defined in action plan	Environmental Health	2017	AQMA to be declared by Executive November 2017 Compliance with Action Plan		AQMA to be declared on and consultation on Action Plan to be begin December 2017	2017	Action Plan implementation to be confirmed after consultation and monitored by Executive Working Group on Air Quality
9	Facilitate and promote home, mobile, remote and flexible working within the Council	Promoting Travel Alternatives	Encourage / Facilitate home-working	HR & IT	2018	Adopt and implement 'Home, Mobile, Remote and Flexible Working Policy' 2019 Reduction in mileage claims, increase public transport claims			2019	Policy adopted to promote and facilitate: - home working including part days, start/finish day at home - flexible start and finish times to avoid peak travel times - compressed hours to reduce days in the office - utilisation of GBC building facilities for mobile working e.g. park barn, japonica - Virtual meetings and conference calls with colleagues and suppliers -ICT provision to facilitate working methods. Unified comms to include audio, video and webex facilities

Measure No.	Measure	EU Category	EU Measure Classification	Lead Department	Implementation Phase	Key Performance Indicator	Costs	Progress to Date	Estimated Completion Date	Comments
10	Promote alternative travel to work at the Council	Promoting Travel Alternatives	Workplace Travel Planning	HR & Facilities management	2018	Adopt and implement a 'Staff Travel Plan' by December 2018	Within current resource		2018	Promote alternative transport to work : - car sharing - Bike to work scheme (salary sacrifice scheme to buy bike) - Provision of lockers, changing and shower facilities to support cyclists, runner, walkers - promote and incentivise park and ride scheme - Incentivise non car use
11	Air quality modelling of Surrey for PM10, PM2.5, NO2	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	All Surrey Local Authorities	2017	Model delivered by December 2017	£4,000 per Local Authority (already in budget)	In May 2017, all Surrey Local Authorities agreed to procure Surrey wide modelling study.	Dec 2017	Results of model will give identify potential hotspots for PM2.5, PM10 and will allow further local investigation and action.
12	Compliance with nitrogen dioxide air quality limits on A331 – straight line exceedance as identified in 'UK plan for tackling roadside nitrogen dioxide concentrations'	Traffic Management	Other – unknown at this time	Environmental Health	2017-19	A331 compliant with nitrogen dioxide air quality limits by 2020	Defra grant of £50,000 to conduct feasibility study proposal	Feasibility being conducted jointly with Surrey Heath Borough Council and Rushmoor Borough Council	2020	Findings of feasibility study will determine future scope and costs.
13	Participate in the University of Surrey iSCAPE Living Lab project. Guildford Living Lab aims to raise citizen awareness about air quality and the impact of green infrastructure to reduce air pollution and improve health and well-being.	Public Information	Via other mechanisms	Environmental Health	2017		Within current resources	Initial scoping meeting with University and future meetings planned on collaboration.	2020	Next steps would be collaborating on developing the interactive displays and participating in the public engagement activities and events. More information on the project https://www.iscapeproject.eu/

Measure No.	Measure	EU Category	EU Measure Classification	Lead Department	Implementation Phase	Key Performance Indicator	Costs	Progress to Date	Estimated Completion Date	Comments
14	Anti vehicle idling, for example at level crossings, taxi ranks, the station, bus stops and outside schools.	Traffic Management	Other	GBC and SCC	2017	Reducing emissions	£3,000 for signs.	Scoping discussion with SCC	2018	Three level crossings in the Borough (Ash and Chilworth X 2) have been identified for the potential scheme.
Medium Term (2019-20)										
15	Adopt GBC Policy lease car and fleet vehicles procurement	Promoting Low Emission Transport and Vehicle Fleet Efficiency	Company Vehicle Procurement - Prioritising uptake of low emission vehicles Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Operational Services and Environmental Health	2019	GBC adopt Policy on procuring lease case and fleet vehicles		Two electric pool cars (Nissan Leaf) have been purchased and charging points are due to be installed at GBC Millmead offices. 2 electric vehicles in fleet at Woking Road Depot plus 2 more by of 2017. Charging point has been installed at the Woking Road Depot.	2020	Policy to include: - Review of lease car scheme to require reduced emissions vehicles and favour electric vehicles -Review essential car user allowance scheme offer incentives -criteria for purchasing fleet vehicles (electric vehicles and lowest emission vehicles where operationally and financially viable) -electric charging points to be provided at GBC sites. -regular fleet replacement to ensure using lowest emission vehicles on the market.
16	Review/Create GBC policy for travelling to meetings, seminars and training courses	Promoting Travel Alternatives	Workplace Travel Planning	HR	2019	Revised policy implemented in 2019		There are examples of good practice around the Council but no consistency or formal policy.	2019	Implement Travel Policy for training courses, seminars and meeting – to include increase e-learning, in house provision, use of public transport when travelling. Incentivise non-car use.
17	Service delivery review to reduce public journeys to Council properties where appropriate	Promoting Travel Alternatives	Personalised travel planning		2019	Policy adopted and implemented		There are examples of good practice around the Council but no consistency or formal policy		Identify reasons for members of the public journeys to council offices and if the journey is necessary. e.g. dropping off documents, making a booking, attending a meeting and consider a different way to deliver the service e.g. online booking, officers travelling to venue.

Measure No.	Measure	EU Category	EU Measure Classification	Lead Department	Implementation Phase	Key Performance Indicator	Costs	Progress to Date	Estimated Completion Date	Comments
18	Adopt GBC Electric Vehicle Charging Strategy	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	Operational Services and Environmental Health	2019			Electric charging points on Council property: -2 Woking Road Depot -2 car parks	ongoing	<p>Actions could include:</p> <ul style="list-style-type: none"> -Increase in: GBC sites, GBC car parks, GBC assets, GBC major projects -require as part of the planning process <p>Encourage businesses and residents to provide charging points</p> <p>Apply for grants if available</p>
19	To encourage employers to introduce travel plans.	Promoting Travel Alternatives	Workplace Travel Planning	Environmental Health	2019	Target for number of companies with travel plans		None – new initiative	2020	There is an opportunity to consider site users, such as patients, customers, visitors.
20	Work in partnership with local bus companies to bid to Defra for grant from the 'Low emissions bus scheme' to increase number of low and ultra-low emission buses in Guildford or Clean Bus Technology Fund 2017-2019	Vehicle Fleet Efficiency	Promoting Low Emission Public Transport	Environmental Health	2017	Reducing emissions	<p>Bid submitted</p> <p>Successful bid</p> <p>Increase in low and ultra-low emission buses in Guildford</p>	<p>Initial scoping discussions with one operator.</p> <p>Desk top review of grants available.</p>	2022	<p>'Low emission bus scheme' (LEBS). LEBS aims to:</p> <ul style="list-style-type: none"> • increase the take up of low and ultra-low emission buses, speeding up the transition to an ultra-low emission bus fleet in this country • help improve local air quality in our towns and cities <p>https://www.gov.uk/government/publications/low-emission-bus-scheme</p> <p>Defra are expected to launch bids process in Autumn 2017. This will provide funding to help put more buses on the road over the period 2018 to 2021.</p>

Measure No.	Measure	EU Category	EU Measure Classification	Lead Department	Implementation Phase	Key Performance Indicator	Costs	Progress to Date	Estimated Completion Date	Comments
Long term (2020-onwards)										
21	Improve sustainable transport opportunities in line with the Guildford Borough Transport Strategy	Policy Guidance and Development Control	Other policy	Planning and Regeneration	Present – 2035+	1. Increased rail patronage / Annual entries and exits at rail stations in Guildford borough / Office of Rail and Road – annual 2. Increased rail modal share / Rail modal share for travel to work journey in Guildford borough / Census – every 10 years 3. Increased bus modal share / Bus modal share for travel to work journey in Guildford borough / Census – every 10 years 4. Increased walking and cycling modal share / Walking and cycling modal share for travel to work journey in Guildford borough / Census – every 10 years	Existing and future bids	Progress with respect to Key Performance Indicators: • 4: Increased rail patronage, based on Annual entries and exits at rail stations in Guildford borough: 2014/15: 11,128,084 entries and exits: 2015/16: 11,290,732 entries and exits. • Census data used for indicators 2, 3 and 4 – next collected in 2021. Progress with respect to schemes: Delivered in 2016/17: • Improvement of River Wey towpath around Parsonage Watermeadows (linking A25 to A320) Newly committed in 2016/17: •SRN7: A3 northbound off-slip lane widening at University Interchange (approaching Tesco roundabout) improvement scheme •SRN8: A3 southbound off-slip lane widening to A320 Stoke Interchange improvement scheme – £2.5m committed funding •Tunsgate public realm scheme.	Ongoing	
22	Taxi and Private Hire Licensing Policy	Promoting Low Emission Transport	Taxi Licensing conditions	Licensing	2022	Low emission taxi fleet		None – new initiative	2032	Scope change to taxi and private hire licensing policy to require taxi and private hire vehicles to be low emission/electric.

Measure No.	Measure	EU Category	EU Measure Classification	Lead Department	Implementation Phase	Key Performance Indicator	Costs	Progress to Date	Estimated Completion Date	Comments
23	Revise Green Scheme Parking to introduce differential charging according to emissions Extend policy to on-street parking permits	Traffic Management	Emission based parking or permit charges	Parking Services	2020	Uptake in reduced rate permits			ongoing	Opportunity to extend differential charging scheme to on-street residential parking.
24	To encourage freight and delivery companies to introduce travel plans	Freight and Delivery Management	Route Management Plans/ Strategic routing strategy for HGVs/Delivery and Service plans	Environmental Health	2020			None – new initiative	2022	
25	Research road configuration best practice to achieve improvements in air quality	Traffic Management	Strategic highway improvements, Re-prioritising road space away from cars, inc Access management, Selective vehicle priority, bus priority, high vehicle occupancy lane	Environmental Health	2020			None – new initiative		Learn from best practice and up to date research when proposing new schemes.