



# Waverley Borough Council

## Air Quality Action Plan (Draft)

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

December 2022

## Waverley Borough Council

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## Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the action we will take to improve air quality in Waverley between 2023 and 2028.

This action plan replaces the previous action plan which ran from 2008. Projects delivered through the past action plan include: the Hindhead Tunnel and bypass (which alleviated congestion on the A3 with Hindhead Air Quality Management Area (AQMA) being revoked), ongoing work in relation to Farnham town centre, review of the Urban Traffic Control (UTC) system in Godalming, and the Waverley Corporate Travel Plan. Wider measures such as highlighting air alert options on Waverley Borough Council's (WBC's) website, behavioural change campaigns and working with schools to reduce emissions associated with the school run have also been delivered. It is not feasible to determine the specific impacts of these individual schemes, although these, as well as measures implemented at county, national and international levels have resulted in trends in reductions in concentrations across Waverley.

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas<sup>1,2</sup>.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion<sup>3</sup>. Waverley Borough Council is committed to

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<sup>1</sup> Environmental equity, air quality, socioeconomic status and respiratory health, 2010

<sup>2</sup> Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

<sup>3</sup> Defra. Abatement cost guidance for valuing changes in air quality, May 2013

reducing the exposure of people in Waverley to poor air quality in order to improve health.

Actions have been developed that can be considered proportionate to the air quality objective exceedances within the AQMAs. Therefore, measures are focussed on what can be delivered in the next few years. This AQAP is complemented by a Clean Air Strategy (CAS), which considers measures much more widely across Waverley, which will also help to reduce emissions within the AQMAs. The CAS is therefore included as an appendix. Where measures have been considered, but discounted, they are included in Appendix B under the broad topics outlined in Defra's reporting templates.

Our priorities are

- to work collaboratively with SCC to ensure that the Farnham Infrastructure Programme is delivered, and displacement of traffic does not become a risk to the achievement of air quality objectives elsewhere in Farnham;
- to adopt and implement the Waverley Clean Air Strategy, which this Action Plan supports (incorporating measures to reduce emissions across Waverley), which will assist in improving air quality and therefore maintaining concentrations below air quality objectives in Godalming and Farnham; and
- Report on an annual basis the implementation of both the Farnham Infrastructure Programme and the Waverley Clean Air Strategy, as well as monitored concentrations within the AQMA.

In this AQAP we outline how we plan to effectively tackle air quality issues within our control. However, we recognise that there are a large number of air quality policy areas that are outside of our influence (such as vehicle emissions standards agreed in Europe), but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond Waverley Borough Council's direct influence.

## Responsibilities and Commitment

This AQAP was prepared by the Environmental Protection team of Waverley Borough Council with the support and agreement of the following officers and departments:

Transport Studies, Surrey County Council  
Environmental Health Manager (Environmental Protection) (WBC)  
Environmental Health Officer (Air Quality) (WBC)  
Air Quality Consultants  
Portfolio Holder for Environment and Sustainability (WBC)  
Sustainable Transport Projects Officer (WBC)  
Comms and Engagement Manager (WBC)  
Portfolio Holder for Planning and Economic Development  
Guildford Air Quality (Guildford Borough Council)  
Development Lead Strategic Sites (WBC)  
Surrey County Councillor for Farnham North (Surrey County Council)  
Senior Planning Policy Officer (WBC)  
Economic Development Manager (WBC)  
Councillor - Farnham Town Council  
Head of Regulatory Services (WBC)  
Public Health (Surrey County Council)  
Sustainability Manager (WBC)  
Surrey County Council Green Futures

This AQAP has been approved by the Head of Regulatory Services. On behalf of the Surrey County Council Director of Public Health, the Public Health team work closely with Surrey Air Alliance including District and Borough Council partners responsible for submitting Annual Statement Reports (ASR) on air quality within their area; to develop initiatives, air quality action plans, and implement actions to improve air quality across the county of Surrey. Public Health is also contributing to the development of a Clean Air Strategy for Waverley.

The AQAP will be reviewed by the Climate Change Emergency Board and Overview and Scrutiny for Services prior to going out to consultation.

This AQAP will be subject to an annual review, appraisal of progress, with progress each year reported in the Annual Status Reports (ASRs) produced by Waverley Borough Council, as part of our statutory Local Air Quality Management duties.

## **Waverley Borough Council**

If you have any comments on this AQAP please send them to Environmental Health at: Waverley Borough Council, Council Offices, The Burys, Godalming, Surrey, GU7 1HR

Telephone: 01483 523393

Email: [Environmentalhealth@waverley.gov.uk](mailto:Environmentalhealth@waverley.gov.uk)

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# 1 Introduction

This report outlines the actions that Waverley Borough Council will deliver between 2023 and 2028 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to Waverley Borough Council's administrative area.

It has been developed in recognition of the legal requirement on the local authority for the AQAP to *have the purpose of securing that air quality objectives are achieved*. The air quality objectives are set under Part IV of the Environment Act 1995<sup>4</sup>, Part 4 of the Environment Act 2021<sup>5</sup>, and relevant regulations made to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

This Plan will be reviewed every five years at the latest and progress on measures set out within this Plan will be reported on annually within Waverley Borough Council's air quality Annual Status Report (ASR).

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<sup>4</sup> Available at <https://www.legislation.gov.uk/ukpga/1995/25>

<sup>5</sup> Available at <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

## 2 Summary of Current Air Quality in Waverley

Air quality in Waverley is generally good when compared to national air quality objectives. There are currently two AQMAs declared for the nitrogen dioxide annual mean air quality objective in Godalming and Farnham. This AQAP includes actions for both of the AQMAs. Figures 1 and 2 illustrate monitoring data for 2019 within, and just outside, each of the AQMAs. These monitoring sites are part of a wider monitoring strategy across the borough, for both nitrogen dioxide and PM<sub>10</sub>.

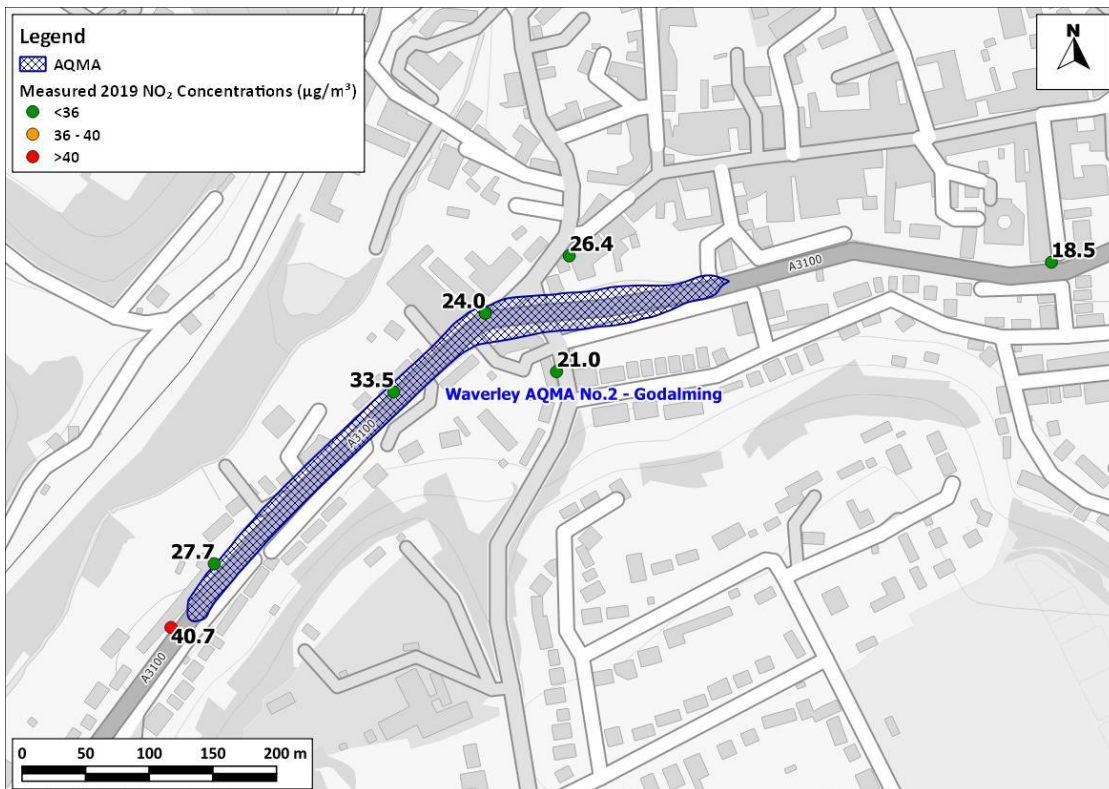
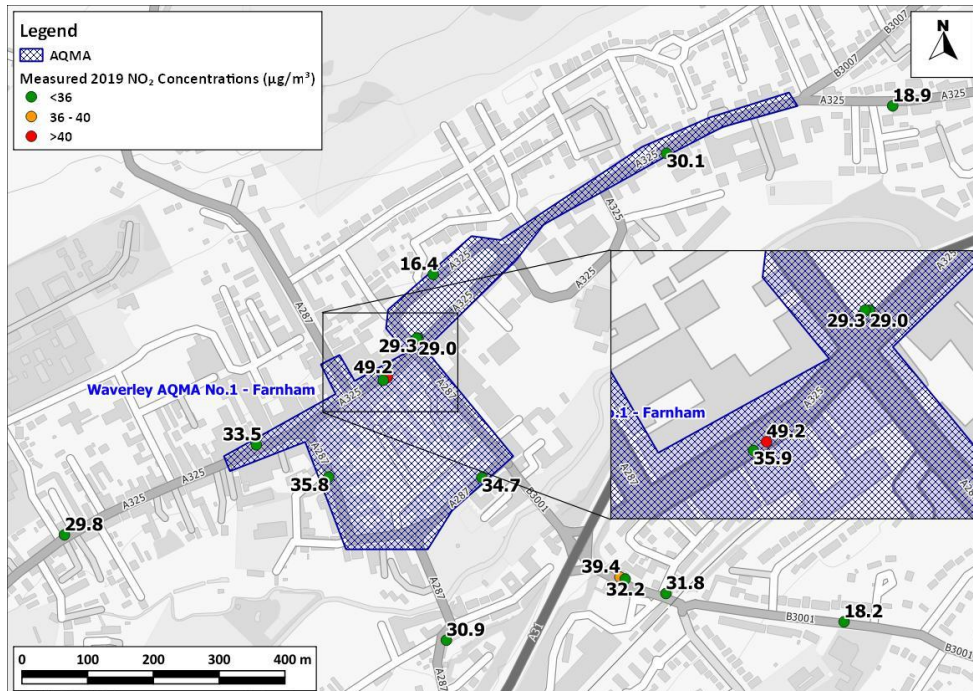


Figure 1 Godalming AQMA showing 2019 monitored concentrations



**Figure 2 Farnham AQMA showing 2019 monitored concentrations**

In Godalming, there was a marginal exceedance just outside the AQMA on Ockford Road in 2019. This is representative of one property with a porch which is closer to the carriageway than other residential properties, the road at this location is on a gradient, with reduced dispersion due to the effect of houses and hedges creating a ‘canyon’. Since 2019, concentrations at this site have been well below the objective (32.9  $\mu\text{g}/\text{m}^3$  in 2020 and 33.7  $\mu\text{g}/\text{m}^3$  in 2021).

In Farnham, the exceedance is restricted to diffusion tube site WBC9 which is located on The Borough, which measured 49.2  $\mu\text{g}/\text{m}^3$  in 2019. However, WBC9 is at ground floor level, with relevant exposure in flats above the shops, and a tube (WBC51) is situated higher up the building to represent relevant exposure, which has been below the objective in both 2019 and 2021 (no annual mean reported in 2020). Since 2019 WBC9 has also been below the objective (33.6  $\mu\text{g}/\text{m}^3$  in 2020 and 34.1  $\mu\text{g}/\text{m}^3$  in 2021).

Although the exceedances are marginal in 2019, actions to improve air quality at these locations are set out in this Plan, which is in line with WBCs statutory requirements within the LAQM process. It should be noted that Upper Hale Road in Farnham is currently (2021) measuring concentrations marginally higher than the Borough (35.1  $\mu\text{g}/\text{m}^3$  at WBC4), and this location is representative of facades of

## **Waverley Borough Council**

properties nearby, however this is below relevant air quality objectives. The AQAP has, however, been developed, with the aim that concentrations will not worsen at this location as a result of any actions within this plan.

Alongside this AQAP, a Clean Air Strategy (CAS) has also been developed which includes more strategic actions, which will not only positively impact on the AQMAs, but also across the borough, including Upper Hale Road.

Waverley Borough Council's Annual Status Reports can be found at <https://www.waverley.gov.uk/Services/Environmental-concerns/Pollution-control/Air-quality/Air-quality-reports>.

## 3 Waverley's Air Quality Priorities

### 3.1 Public Health Context

Air pollution is a major public health risk ranking alongside cancer, heart disease and obesity. A review by the World Health Organisation concluded that long-term exposure to air pollution reduces life expectancy by increasing the incidence of lung, heart and circulatory conditions. The Department of Health and Social Care's advisory Committee on the Medical Effects of Air Pollutants (COMEAP) has estimated that long-term exposure to man-made air pollution in the UK has an annual impact on shortening lifespans, equivalent to 28,000 to 36,000 deaths<sup>6</sup> (COMEAP, 2018). Poor air quality can affect health at all stages of life. Those most affected are the young and old. In the womb, maternal exposure to air pollution can result in low birth weight, premature birth, stillbirth or organ damage. In children, there is evidence of reduced lung capacity, while impacts in adulthood can include diabetes, heart disease and stroke. In old age, a lifetime of exposure to air pollution can result in reduced life-expectancy and reduced wellbeing at end of life. There is also emerging evidence for a link between air pollution and an acceleration of the decline in cognitive function (Defra, 2019)<sup>7</sup>.

Poor air quality disproportionately affects the poorest and most vulnerable in our communities including children. Public health not only aims to improve health, but also reduce health inequalities by using an evidence-based approach to make recommendations on the delivery of health and wellbeing services. As such, this AQAP will support work underway within the public health arena.

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<sup>6</sup> <https://www.gov.uk/government/publications/nitrogen-dioxide-effects-on-mortality/associations-of-long-term-average-concentrations-of-nitrogen-dioxide-with-mortality-2018-comeap-summary>

<sup>7</sup> <https://www.gov.uk/government/publications/clean-air-strategy-2019>

This AQAP will complement work underway at County level. Public Health staff have drafted the Joint Strategic Needs Assessment (JSNA)<sup>8</sup> which is an assessment of the current and future health and social care needs of the local community. The JSNA informs the Health and Wellbeing Strategy (HWS)<sup>9</sup> which is a strategy for meeting the needs identified in the JSNA. These are needs that could be met by the local authority, Integrated Care Boards or NHS England. Within the JSNA there is a section on air quality.

The Public Health Outcome Framework (PHOF) for England recognises the burden of ill health resulting from poor air quality. PHOF Indicator D01 reports that 5.7% of deaths in Waverley during 2020 were attributable to particulate air pollution (PM<sub>2.5</sub>) (undertaken using the 'new method'), which is slightly lower than for Surrey (6.2%) but slightly higher than the England average, 5.6%<sup>10</sup>.

## 3.2 Planning and Policy Context

### 3.2.1 Waverley Corporate Strategy 2020-2025

The Waverley Corporate Strategy<sup>11</sup> sets out the vision *'that Waverley will be environmentally, economically and financially sustainable with healthy, inclusive communities and housing available for all who need it'*. The Strategy sets out the strategic priorities of the Council which include:

- Supporting a strong, resilient local economy;
- Taking action on Climate Emergency and protecting the environment;

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<sup>8</sup> <https://www.surreyi.gov.uk/jsna/>

<sup>9</sup> <https://www.healthysurrey.org.uk/about/strategy>

<sup>10</sup> Data available at <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/1/gid/1000043/pat/6/par/E12000008/ati/101/are/E07000216/yrr/1/cid/4/tbm/1>

<sup>11</sup> <https://www.waverley.gov.uk/Services/Council-information/About-Waverley-Borough-Council/Corporate-Strategy-2020-25>

- Effective strategic planning and development management to meet the needs of our communities; and
- Improving the health and wellbeing of our residents and communities.

As well as the commitment to be carbon neutral by 2030, WBC has included a number of high level commitments to deliver the strategic priorities above, such as

- promoting a pedestrian-friendly and cycle friendly transport network; and
- taking action on air quality issues, especially those caused by vehicle emissions, and encouraging zero-carbon buses and taxis.

This AQAP therefore directly complements the overall vision of the Council, and will assist in delivering the above priorities.

### **3.2.2 Local Plan**

The Local Plan Part 1: Strategic Policies and Sites (LPP1)<sup>12</sup>, adopted in 2018, sets out the Council's spatial framework for delivering the development and change needed to realise the vision for development in Waverley up to 2032. Local Plan Part 2 (LPP2) will form the second stage of Waverley's new Local Plan. Together with LPP1 this document will replace the 2002 Local Plan. LPP2 will provide the more detailed 'Development Management' policies, review a suite of local designations and will allocate sites needed for housing or other uses in certain areas of Waverley.

LPP1 has a number of references to air quality. In Policy ST1 Sustainable Transport:

*“The Council will work in partnership with Surrey County Council, neighbouring authorities, transport providers and other key stakeholders to ensure that development schemes:*

*.... 7. are consistent with the objectives and actions within the Air Quality Action Plan”*

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<sup>12</sup> <https://www.waverley.gov.uk/Services/Planning-and-building/Planning-strategies-and-policies/Local-plan/Local-Plan-Part-1>

LPP2 (Pre-Submission Document) currently includes Policy DM1 as follows:

DM1: Environmental Implications of Development

*“Development should:*

*a) Avoid harm to the health or amenity of occupants of nearby land and buildings, and future occupants of the development, including by way of an unacceptable increase in pollution, light, noise, dust, vibration, and odour, or an increase in flood risk;*

*b) Not cause a deterioration to the environment by virtue of potential pollution of air, soil or water, including that arising from the storage and use of hazardous substances, while seeking opportunities to improve air and water quality where possible; ....”*

One of the objectives of LPP1 is *“to support the delivery of at least 11,210 additional homes in Waverley in the period 2013 to 2032 (an average of 590 homes a year). To contribute to the delivery of sustainable communities by directing most new development to the main settlements of Farnham, Godalming, Haslemere and Cranleigh, where there is the best available access to jobs, services and other facilities”*. This includes a new settlement of 2,600 homes at the Dunsfold Aerodrome site. Particularly where large-scale development is planned, air quality must be fully considered from an early stage in the process, and air quality is referenced within the Dunsfold Park Garden Village Supplementary Planning Document. This AQAP will ensure that the principles set out in LPP1 and LPP2 will contribute to improving air quality within the AQMAs, and more widely.

### **3.2.3 Local Transport Plan**

Surrey County Council is updating its Local Transport Plan<sup>13</sup>, which sets out the changes required to achieve net zero emissions by 2050. SCC are committed to

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<sup>13</sup> <https://www.surreycc.gov.uk/roads-and-transport/policies-plans-consultations/transport-plan/strategies/air-quality-strategy>



significantly transforming transport networks to meet this national target and LTP4 sets out the following key policies:

- Active travel and personal mobility;
- Public and shared transport;
- Promoting zero emission vehicles; and
- Planning for Place.

In the short-term (to 2025), LTP measures will be focused on achieving a 'green' and 'healthy' recovery of transport choices after Covid-19, and taking action and strengthening transport links to deliver the planning, development, design, public space management and digital connectivity aspects of the LTP4. This also includes building on the increased interest in walking and cycling to start a 'shift' away from car dependency, rebuilding trust in public transport, accelerating EV uptake, continuing to build on existing good practice, and delivery of relevant schemes. All of these shifts will reduce local air quality emissions and therefore assist with the delivery of this AQAP.

### **3.2.4 Farnham Infrastructure Programme**

Surrey County Council, Waverley Borough Council, Farnham Town Council and the local MP are working together to transform Farnham and its surrounding areas by addressing issues such as congestion and air quality, through the Farnham Infrastructure Programme (FIP). Objectives of the programme include:

- To rapidly reduce carbon emissions, ensuring that Farnham and Waverley are on track for net zero by 2050 (note WBC has committed to becoming a carbon neutral council by 2030);
- Provide well-connected communities across Farnham;
- Support the economic vitality of Farnham and enable sustainable growth; and
- Improve the quality of place in Farnham with clean air, healthy lifestyles, and less dominance of traffic on communities.

The Farnham Optimised Infrastructure Plan<sup>14</sup> sets out the policy context, challenges and opportunities, objectives, potential options and emerging strategy and next steps to be undertaken to deliver improvements in Farnham.

The proposals currently being consulted on are:

- Castle Street and Downing Street improvements;
- Changing the traffic flow direction, and widening pavements on The Borough, Castle Street and Downing Street; and
- Options to reduce congestion on the A31 and to improve crossings for pedestrians and cyclists, and for public transport.

The FIP is supported by other projects being implemented by SCC including a short and medium term improvements or ‘quick wins’ project<sup>15</sup> looking at what can be implemented quickly in the town, and the Farnham Local Cycling and Walking Infrastructure Plan (LCWIP). The options being implemented within the ‘quick wins’ project are the re-routing of HGVs, implementation of 20 mph zones, removing A road status for roads that cross the town centre and addressing concerns related to narrow pavements and pedestrian safety.

### **3.2.5 Waverley Carbon Neutrality Action Plan 2020-2030**

In 2019 WBC declared a climate emergency and committed to becoming a carbon neutral council by April 2030. The plan provides a statement of the council’s areas of focus to achieve a carbon neutral borough, which will evolve as projects and actions are developed further<sup>16</sup>. Seven key priority areas have been identified each

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<sup>14</sup> Available at <https://www.surreycc.gov.uk/roads-and-transport/policies-plans-consultations/major-transport-projects/farnham-infrastructure-programme/farnham-infrastructure-programme-key-documents>

<sup>15</sup> Short and medium-term improvements or ‘quick wins’ project - Surrey County Council ([surreycc.gov.uk](https://www.surreycc.gov.uk))

<sup>16</sup> <https://www.waverley.gov.uk/Services/Environmental-concerns/Sustainability-and-conservation/Climate-change-strategy-and-action-plan>

containing a number of high-level targets that will focus efforts to achieve the ambitious carbon neutral target. Embedding a carbon neutral culture within processes and policies is significant to sustaining long term change. Key priority areas include a focus on active travel and air quality, focus on energy generation, a focus on the built environment, on land use and adaptation, and on supporting a green economy, all of which complement the aims of this AQAP.

### **3.2.6 Air Quality Action Plan (July 2008)**

The previous action plan adopted in 2008<sup>17</sup> contained specific actions for the (then) three AQMAs. In relation to Farnham, the town centre package, as outlined in the Farnham Review Study, was supported. This featured a number of different strands including measures to increase active travel, changes in delivery patterns, traffic management, and a reallocation of road space for pedestrians. However, in response to local concerns, particularly in relation to a displacement of traffic causing issues elsewhere, further feasibility work was recommended. In relation to Godalming, work to update the existing urban traffic control (UTC) system was highlighted, in order to reduce congestion and improve air quality. Other wider measures were also included in the previous Air Quality Action Plan, such as the Waverley Corporate Travel Plan, behaviour change campaigns and school travel plans.

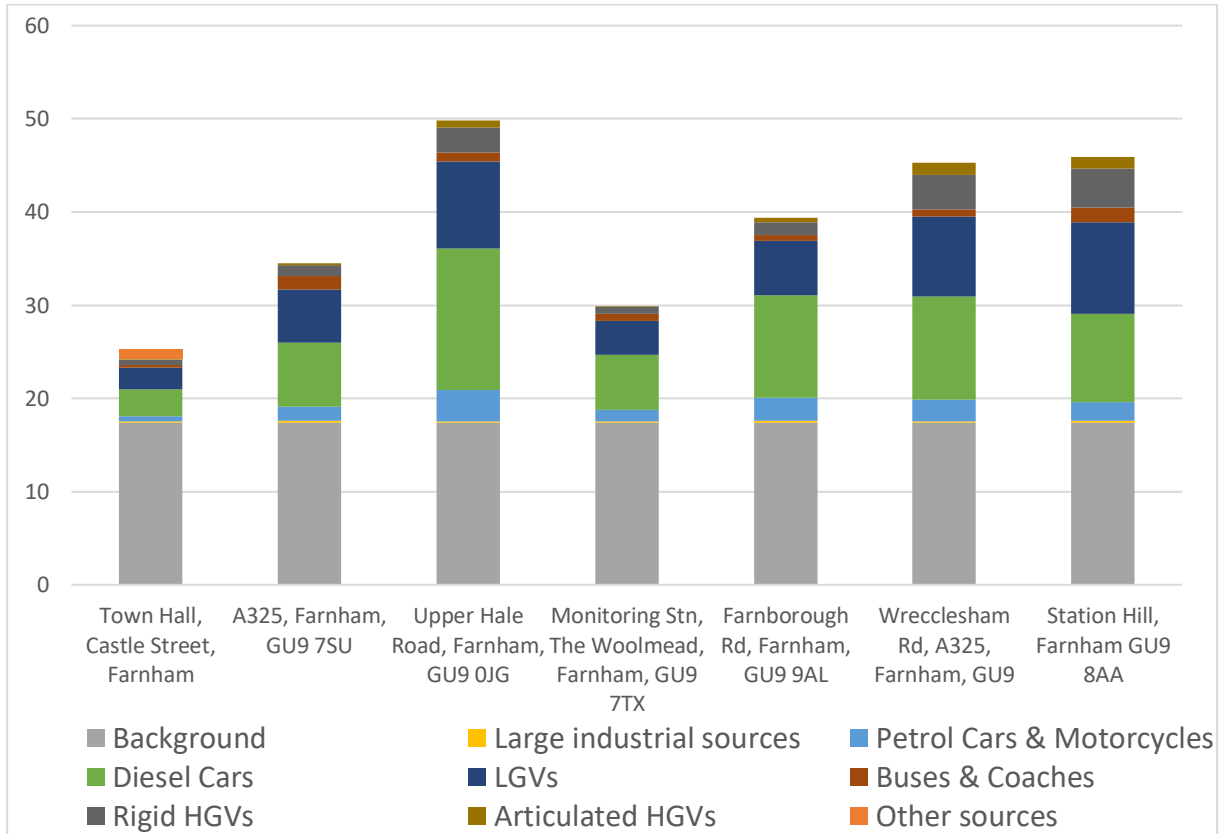
## **3.3 Source Apportionment**

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within the AQMAs.

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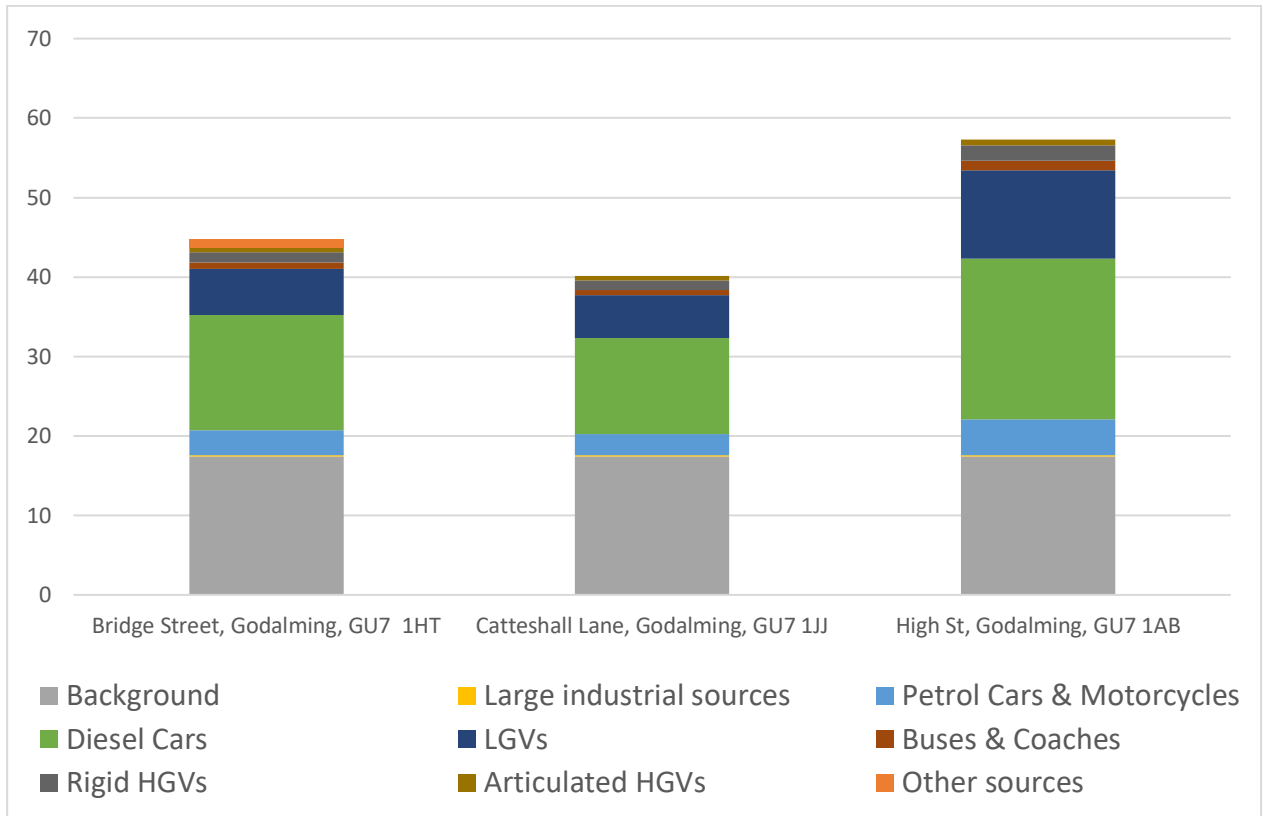
<sup>17</sup> <https://www.waverley.gov.uk/Services/Environmental-concerns/Pollution-control/Air-quality/Air-quality-reports>

A source apportionment exercise was carried out by CERC as part of a wider modelling study across Surrey<sup>18</sup> in 2019 using a base year of 2017. This identified that within the AQMAs, the source contributions were as follows:



**Figure 3: Source Apportionment (µg/m³ NO<sub>2</sub>) in 2017 for locations in Farnham (CERC, 2019)**

<sup>18</sup> Detailed Air Quality Modelling and Source Apportionment (August 2019) Available at: [https://www.guildford.gov.uk/media/32331/Detailed-air-quality-report/pdf/FM1183\\_Surrey\\_CERC\\_Guildford\\_19Nov19.pdf?m=637296299125670000](https://www.guildford.gov.uk/media/32331/Detailed-air-quality-report/pdf/FM1183_Surrey_CERC_Guildford_19Nov19.pdf?m=637296299125670000). Further Interpretation of air quality modelling in Waverley, carried out for Surrey local authorities (March 2020) Available at: [https://www.waverley.gov.uk/Portals/0/Documents/services/environmental-concerns/pollution-control/air%20quality/Further\\_interpretation\\_of\\_air\\_quality\\_modelled\\_in\\_Waverley\\_from\\_CERC\\_\\_\\_March\\_2020.pdf?ver=FuKDzFNczauvtmwyM2DAw%3D%3D](https://www.waverley.gov.uk/Portals/0/Documents/services/environmental-concerns/pollution-control/air%20quality/Further_interpretation_of_air_quality_modelled_in_Waverley_from_CERC___March_2020.pdf?ver=FuKDzFNczauvtmwyM2DAw%3D%3D)



**Figure 4: Source Apportionment (µg/m³ NO<sub>2</sub>) in 2017 for locations in Godalming (CERC, 2019)**

Although Figure 3 and Figure 4 are based on modelling undertaken for 2017 across Surrey (and hence not locally verified), the source contribution provides a useful indication of the contributions from different vehicle types within each of the AQMAs, which can be used to ensure that measures are appropriately targeted. In Farnham, after background concentrations have been accounted for, diesel cars, LGVs and rigid HGVs contribute the most to overall concentrations. In Godalming, there is a similar picture in that diesel vehicles predominate with respect to NO<sub>x</sub> emissions.

### 3.4 Required Reduction in Emissions

The improvement in road NO<sub>x</sub> emissions in order to meet the objective at monitored locations where concentrations exceeded the objective in 2019, is shown in Table 1,

categorised by AQMAs. As set out in LAQM Technical Guidance TG22<sup>19</sup> paragraphs 7.115 to 7.117, any required percentage reductions of local emissions should be expressed in terms of NO<sub>x</sub> due to local road traffic. This is because the primary emission is NO<sub>x</sub> and there is a non-linear relationship between NO<sub>x</sub> concentrations and NO<sub>2</sub> concentrations. The following calculations use the 2019 monitored NO<sub>2</sub> concentrations presented in the Annual Status Report 2022, and the methodology set out in TG22 Box 7.6. The ‘Road NO<sub>x</sub> - current’ concentration has been calculated by using the NO<sub>x</sub> to NO<sub>2</sub> calculator. The road NO<sub>x</sub> concentration required to give a total NO<sub>2</sub> concentration of 40 µg/m<sup>3</sup> (road NO<sub>x</sub>-required) has been calculated using the NO<sub>x</sub> to NO<sub>2</sub> calculator by entering a total NO<sub>2</sub> concentration of 40µg/m<sup>3</sup>, along with the background NO<sub>2</sub> concentration. Mapped backgrounds<sup>20</sup> have been used. The ratio of ‘road NO<sub>x</sub>-required’ to ‘road NO<sub>x</sub>-current’ gives the required percentage reduction in local road NO<sub>x</sub> emissions to achieve the objective.

WBC51 was 32.2 µg/m<sup>3</sup> in 2019 and therefore no improvements are required to achieve the air quality objective. WBC9, which was above the objective is not a relevant location for the air quality objective. In Godalming, approximately 3% reduction in road NO<sub>x</sub> emissions is required to achieve the objective, based on 2019 emissions (WBC31). It should be noted that since 2019 emissions have reduced at these locations, evidenced by lower concentrations which are below the air quality objectives. This is likely to be due to both fleet improvements, and, especially in 2020 the impact of travel restrictions put in place with regards to the Covid pandemic.

**Table 1: Percentage Decrease in Road NO<sub>x</sub> required to Meet Annual Mean NO<sub>2</sub> Objective at Relevant Modelled Receptors (µg/m<sup>3</sup>) in 2019**

Diffusion Tube	Annual Mean Contribution (µg/m <sup>3</sup> )					% Decrease in Road NO <sub>x</sub> to Meet Objective
	Monitored NO <sub>2</sub> Concentration	Road NO <sub>x</sub> - Current (a)	Road NO <sub>x</sub> – Required (b)	Background NO <sub>2</sub> (for information)	Difference between a and b	

<sup>19</sup> Available at <https://laqm.defra.gov.uk/wp-content/uploads/2022/08/LAQM-TG22-August-22-v1.0.pdf>

<sup>20</sup> <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/background-maps/>

AQMA 1 Farnham						
WBC51	32.2 µg/m <sup>3</sup>	36.28 µg/m <sup>3</sup>	53.49 µg/m <sup>3</sup>	13.73 µg/m <sup>3</sup>	Lower than objective	no reduction required
AQMA 2 Godalming						
WBC31	40.7 µg/m <sup>3</sup>	60.49 µg/m <sup>3</sup>	58.87 µg/m <sup>3</sup>	11.12 µg/m <sup>3</sup>	1.62 µg/m <sup>3</sup>	2.68%

### 3.5 Key Priorities

Based on the source apportionment, and the fact that the objectives have been achieved at all sites in 2020 and 2021, the following priorities are proportionate, and will ensure that transport related emissions are reduced. In order to reduce NO<sub>2</sub> concentrations, reductions need to focus on diesel vehicles, at the relevant locations, particularly cars, LGVs and to a lesser extent HGVs.

- Priority 1 – to work collaboratively with SCC to ensure that the Farnham Infrastructure Programme is delivered, and displacement of traffic does not become a risk to the achievement of air quality objectives elsewhere in Farnham;
- Priority 2 – adopt and implement the Waverley Clean Air Strategy, which this Action Plan supports (incorporating measures to reduce emissions across Waverley); and
- Report on an annual basis the implementation of both the Farnham Infrastructure Programme and the Waverley Clean Air Strategy, as well as monitored concentrations within the AQMA.

## 4 Development and Implementation of Waverley Borough Council's AQAP

### 4.1 Consultation and Stakeholder Engagement

In developing/updating this AQAP, we have worked with other local authorities, agencies, businesses and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1. This consultation version of the AQAP, alongside the Clean Air Strategy, will be widely consulted on, both online and through events with the Town and Parish Councils. A version of the document will be made available online, with an online questionnaire for direct feedback. The consultation will be advertised through local media, including social media.

The response to our consultation stakeholder engagement is given in Appendix A: Response to Consultation.

**Table 4.1 – Consultation Undertaken**

Consultee	Consultation Undertaken
The Secretary of State	Yes
The Environment Agency	Not applicable for these locations
The highways authority	Yes
All neighbouring local authorities	Yes
Other public authorities as appropriate, such as Public Health officials	Yes
Bodies representing local business interests and other organisations as appropriate	Yes



## 4.2 Steering Group

A Steering Group was set up in order to take this Action Plan revision forward. Up to the publication of the consultation draft, two Steering Group meetings have been held (13<sup>th</sup> September and 18<sup>th</sup> October 2022). The meetings have involved; setting out the background to the air quality issue in Waverley, the process of the Action Plan and Clean Air Strategy, previous work undertaken on air quality (for example Surrey wide air quality modelling undertaken) and gaining input and insight into existing and future policy measures within Waverley and how these may assist in the implementation of the aims of this Plan (and vice versa). Some discussions around evaluation of the measures included were also held. Surrey County Council, as Highways Authority are key to the implementation of the transport measures within the plan, and their input is paramount to the success of this plan. The Steering Group has also had political representation and input from both Waverley Borough Council and Surrey County Council. Also included were public health colleagues from SCC, planning and climate change officers. The Steering Group will continue to be fully involved, and consulted on as the process continues, through comment on this draft report, and following a wider consultation.

## 5 AQAP Measures

Table 5.1 shows the Waverley Borough Council AQAP measures. It contains:

- a list of the actions that form part of the plan
- the responsible individual and departments/organisations who will deliver this action
- estimated cost of implementing each action (overall cost and cost to the local authority)
- expected benefit in terms of pollutant emission and/or concentration reduction
- the timescale for implementation
- how progress will be monitored

**NB:** Please see future ASRs for regular annual updates on implementation of these measures

These measures specific to each of the AQMAs reflects the current status of the statutory air quality objectives in each of the areas. As exceedances of the objectives were marginal in 2019 and there were no exceedances in 2020 or 2021, measures are proportionate, and also reflect resource limitations within the Council. Importantly, this plan is written alongside a Clean Air Strategy, which takes a more strategic view of air quality improvements across the Borough, and reflects that health effects arise from both PM<sub>2.5</sub> as well as NO<sub>x</sub> emissions, acknowledging that health effects are apparent even below current air quality objectives. WBC are fully committed to reducing emissions across the borough, both through this AQAP and through the implementation of the Clean Air Strategy, as well as working collaboratively in related policy areas such as the Local Plan, all of which will assist in reducing concentrations within the AQMAs. Of particular note are the ambitious targets within LTP4 to increase active travel, encourage a switch to Zero Emission Vehicles and implement policies on placemaking. WBC's commitment to work towards becoming net zero will reduce Greenhouse Gas emissions not only in relation to transport, but also more widely for example in energy generation, which will assist in the reduction of local air pollutant emissions, both directly and in reducing background concentrations.

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In relation to Farnham, at this stage the Farnham Infrastructure Programme is currently being consulted on and therefore the adopted package of agreed measures has not been defined. There is also, currently, no specific funding attached to the programme, and for these reasons, the measures for Farnham will be reviewed 6 months after adoption of this plan, in order to ensure that there is progress in the agreement and funding of measures.

Table 5.1 – Air Quality Action Plan Measures - Farnham

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
1	Farnham Infrastructure Programme: Town Centre Changes	Traffic Management	UTC, Congestion Management, Traffic reduction	2023	2025	Surrey County Council, Farnham Town Council, Waverley Borough Council	SCC and external funding pots	No	Not funded	Depends on which option is taken forward	In planning stage – consultation response s being analysed prior to discussion with Member board	Achievement / maintenance of air quality objective compliance	Measured Concentration at Diffusion Tube Locations within AQMA	Consultation concluded October 2022	Air Quality Assessment still to be undertaken. Agreement between different tiers of Government, multiple approval processes, Funding, Officer time for implementation
2	Farnham Infrastructure Programme: Implementing outcomes of 'quick wins' project	Freight and Delivery Management	Route Management Plans/ Strategic routing strategy for HGV's	2022	2022	Surrey County Council, Farnham Town Council, Waverley Borough Council	SCC	No	SCC funded	<£25k	Environmental weight limit implemented to restrict HGV movements through the town centre	Achievement / maintenance of air quality objective compliance	Measured Concentration at Diffusion Tube Locations within AQMA, increase in Active Travel	Completed	Current concerns are (a) enforcement and (b) whether such restrictions should and could be implemented elsewhere in the area

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Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
3	Farnham Local Cycling and Walking Infrastructure Plan (LCWIP)	Promoting Travel Alternatives	Promotion of Cycling Promotion of Walking	2023 for adoption of LCWIP	2033 for completion of implementation	Surrey County Council, Farnham Town Council, Waverley Borough Council	DfT	No	Not funded	Dependant on what will be adopted – funding to be bid for	LCWIP currently being consulted on.	Achievement / maintenance of air quality objective compliance	Increase in Active Travel, Measured Concentration at Diffusion Tube Locations within AQMA	Town and Parish Councils have been consulted, due to go to committee by end of 2022	Dependent upon which schemes will be submitted by SCC as part of DfT's Active Travel funding tranches
4	Encouragement of Electric Vehicles <sup>21</sup> in Farnham through EV infrastructure improve	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote LEVs	2022	Ongoing through period of AQAP	Surrey County Council, Farnham Town Council, Waverley Borough Council	SCC OLEV	No	Partly funded	£100 - £500K	Ongoing	Achievement / maintenance of air quality objective compliance	Use of chargers, increase in proportion of EVs in the fleet in Farnham	Public EV Charging in Riverside Car Park 3 x 6CPs, and Brightwells x 18CPs	Funding, officer time for implementation

<sup>21</sup> it is important to note that EVs are not viewed as a solution to all transport-related health issues. While EVs have significant air quality benefits over conventional petrol and diesel fuelled vehicles, they still create air pollution in the form of small particulates from the wear on brake discs and tyres, which can be harmful to human health. Walking, cycling and travel by public transport remain essential to improving air quality as well as tackling congestion and encouraging physical activity. As such, EVs need to be considered as complementary to a wider sustainable transport approach.

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Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
	ments, including the uptake of EV taxis and buses.														
5	Consistent process for Air quality assessments for developments likely to impact on air quality, including committed development within and outside Waverley	Policy Guidance and Development Control	Planning Guidance	Ongoing	Ongoing	WBC and neighbouring authorities	Within existing budgets	No	n/a	Not explicitly costed as mainly staff time	Currently air quality assessments are requested, as well as mitigation where required. This measure will ensure consistency in the process	Long term targets for reduction in emissions in line with Defra targets	Number of planning applications reviewed and commented on	Ongoing	The process of assessment will ensure that cumulative impacts are incorporated where possible. Collaborative working across boroughs will take applications in neighbouring authorities into account
6	Waverley Clean Air Strategy	Policy Guidance and Development Control	Low Emissions strategy	2023	2028 for completion of	Waverley Borough Council with partners, SCC,	Within existing budgets?	Some projects may be eligible for	Partially funded	£10k - £50k	Going through approvals process including	Aimed at emissions reductions across Waverley. Will tie in	Achievement of targets to be announced by Defra.	Draft report available for	Resource issues with all organisations, as most of

Waverley Borough Council

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
					implementation	Parish Councils, etc		Defra Grant funding			consultation	with targets to be announced by Defra		consultation	actions are not statutory

Table 5.2 – Air Quality Action Plan Measures - Godalming

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
1	Waverley Clean Air Strategy	Policy Guidance and Development Control	Low Emissions strategy	2023	2028 for completion of implementation	Waverley Borough Council with partners, SCC, Parish Councils, etc	Within existing budgets?	Some projects may be eligible for Defra Grant funding	Partially funded	£10k - £50k	Going through approvals process including consultation	Aimed at emissions reductions across Waverley. Will tie in with targets to be announced by Defra	Achievement of targets to be announced by Defra.	Draft report available for consultation	Resource issues with all organisations, as most of actions are not statutory
2	Encouragement of Electric Vehicles	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure	2022	Ongoing through period	Surrey County Council, Godalming Town Council, Waverley	SCC OLEV	No	Partly funded	£100 - £500K	Ongoing	Achievement / maintenance of air quality	Use of chargers, increase in proportion of EVs in the	Public EV Charging in Crown	Funding, officer time for implementation

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Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
	<sup>22</sup> in Godalming through EV infrastructure improvements, including the uptake of EV taxis and buses.		Measure to promote LEVs		2023	Waverley Borough Council						100% compliance	EV fleet in Farnham	<ul style="list-style-type: none"> <li>Court carpark x 2CPs,</li> <li>The Burys x 3CPs,</li> <li>Cattesha Il Lane x 6CPs and Station Rd Farncom</li> </ul>	

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<sup>22</sup> it is important to note that EVs are not viewed as a solution to all transport-related health issues. While EVs have significant air quality benefits over conventional petrol and diesel fuelled vehicles, they still create air pollution in the form of small particulates from the wear on brake discs and tyres, which can be harmful to human health. Walking, cycling and travel by public transport remain essential to improving air quality as well as tackling congestion and encouraging physical activity. As such, EVs need to be considered as complementary to a wider sustainable transport approach.



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Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
														be x 4CPs	
3	Consistent process for Air quality assessments for developments likely to impact on air quality, including committed development within and outside Waverley	Policy Guidance and Development Control	Planning Guidance	Ongoing	Ongoing	WBC and neighbouring authorities	Within existing budgets	No	n/a	Not explicitly costed as mainly staff time	Currently air quality assessments are requested, as well as mitigation where required. This measure will ensure consistency in the process	Long term targets for reduction in emissions in line with Defra targets	Number of planning applications reviewed and commented on	Ongoing	The process of assessment will ensure that cumulative impacts are incorporated where possible. Collaborative working across boroughs will take applications in neighbouring authorities into account

## 5.1 Quantification of measures

The actions within this AQAP have been developed based on the best available evidence of what works in securing emissions reductions within the currently declared AQMAs. Actions being implemented across different timescales, alongside other policy processes at local, national and international levels mean that it is rarely possible to definitively attribute specific actions to outcomes, as outcomes are often driven by multiple and inter-related factors and can be difficult to measure with current datasets. As part of this AQAP, WBC are liaising with Surrey County Council and Farnham Town Council to ensure that the Farnham Infrastructure Programme is quantified in relation to its impact on air quality. There has been qualitative work undertaken on air quality effects of different packages of measures. Any further work should ensure that impacts are quantified, both within the town centre, and at other locations where increases in traffic may be significant.

Many of the other measures within the Clean Air Strategy cannot be easily quantified, as they are ongoing interventions to be implemented over a number of years, and it is difficult to know what the impact will be specifically in the AQMAs. The measures within the Strategy, although have not been specifically quantified, are designed to reduce emissions more widely than just the exceedance area.

It is judged that the measures included within this AQAP, as well as the more general measures within the Clean Air Strategy will ensure that compliance with the air quality objectives are maintained.

## 5.2 Cost Effectiveness of AQAP Actions.

The Government does not expect authorities to undertake detailed cost-benefit analyses in their AQAPs. However, to provide an indication of cost effectiveness, the table below has been determined using best professional judgement to clearly set out impact (i.e., effectiveness) and cost in a qualitative way.

## Waverley Borough Council

Measure No.	Measure	Impact	Cost	Lead Authority (Service Area)
1	Farnham Infrastructure Programme: Town Centre Changes	Potentially <b>medium</b> to <b>high</b> depending on what is implemented	Depends on which option is taken forward	Surrey County Council, Farnham Town Council, Waverley Borough Council
2	Farnham Infrastructure Programme: Implementing outcomes of 'quick wins' project	<b>Low</b>	£50k - £100k	Surrey County Council, Farnham Town Council, Waverley Borough Council
3	Farnham Town Centre Local Cycling and Walking Infrastructure Plan (LCWIP)	Potentially <b>low</b> to <b>medium</b> depending on what is implemented	Dependant on what will be adopted – funding to be bid for	Surrey County Council, Farnham Town Council, Waverley Borough Council
4	Encouragement of Electric Vehicles in Farnham through EV infrastructure improvements, including the uptake of EV taxis and buses.	<b>Medium</b>	£100 - £500K	Surrey County Council, Farnham Town Council, Waverley Borough Council
5	Consistent process for Air quality assessments for developments likely to impact on air quality, including committed development within and outside Waverley	Potentially <b>Medium</b> to <b>high</b> in the longer term	Not explicitly costed as mainly staff time	WBC and neighbouring authorities
6	Waverley Clean Air Strategy	<b>Low</b> to <b>medium</b> within AQMAs	£10k - £50k	Waverley Borough Council with partners, SCC, Parish Councils, etc

**Impact:** *Low* – would reduce emissions, but not measurable by air quality monitoring and would be termed 'negligible' using industry standard guidance for modelling the impacts of developments; *Medium* - a change could be detected using an air quality model such as the NMF, but unlikely to be measurable by air quality monitoring; *High* – a change could potentially be monitored using standard monitoring techniques. It should be noted that the impact is based on NO<sub>2</sub>, not PM<sub>2.5</sub>.

**Cost:** Select from < £10k/£10k - £50k/£50k - £100k/£100k - £500k/£500k - £1m/£1m - £10m/ > £10m (aligned with ASR categories for reporting)

# Appendix A: Response to Consultation

Table A.1 – Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

Consultee	Category	Response
To be completed following consultation		

## Appendix B: Reasons for Not Pursuing Action Plan Measures

Table B.1 – Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
No action specifically discounted		

## Appendix C: Clean Air Strategy

## Glossary of Terms

Abbreviation	Description
AQAP	Air Quality 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'
AQC	Air Quality Consultants
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
CAS	Clean Air Strategy
CERC	Cambridge Environmental Research Consultants
COMEAP	Committee On the Medical Effects of Air Pollution
Defra	Department for Environment, Food and Rural Affairs
EU	European Union
EV	Electric Vehicle
HGV	Heavy Goods Vehicle
HWS	Health and Wellbeing Strategy

## Waverley Borough Council

JSNA	Joint Strategic Needs Assessment
LAQM	Local Air Quality Management
LCWIP	Local Cycling and Walking Infrastructure Plan
LGV	Light Goods Vehicle
MP	Member of Parliament
NHS	National Health Service
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Nitrogen Oxides
PHOF	Public Health Outcomes Framework
PM <sub>10</sub>	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM <sub>2.5</sub>	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
SCC	Surrey County Council
UTC	Urban Traffic Control
WBC	Waverley Borough Council