

# Spelthorne Borough Council

# Air Quality Action Plan

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

2024

## Spelthorne 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 Spelthorne Borough Council (SBC) between 2024 and 2029.

This action plan replaces the previous action plan which ran from 2005. The 2005 AQAP contained 43 actions to reduce NO<sub>2</sub> within Spelthorne, covering a range of topics including:

- Reducing road emissions;
- Reducing emissions from the Council's activities;
- Reducing emissions from Heathrow airport;
- Reducing emissions from land use;
- Reducing emissions from industrial sources;
- Reducing smoke emissions;
- Increasing energy efficiency;
- Increasing Air Quality Monitoring;
- Raising awareness and increasing available information regarding air quality and its improvement; and
- Working in Partnership to control and improve air quality.

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>. Spelthorne Borough Council is committed to reducing the exposure of people in Spelthorne to poor air quality in order to improve health.

We have developed actions that can be considered under seven broad topics:

- Policy guidance and development control
- Promoting low emission plants
- Promoting low emission transport
- Promoting travel alternatives
- Public information
- Transport planning and infrastructure
- Traffic management

As a result of the source apportionment outlined in the report, the following priorities have been identified:

- Priority 1 to maintain air pollutant concentrations below current air quality objectives and where practicable, reduce emissions further to work towards WHO Guideline Values;
- Priority 2 to work collaboratively with Surrey County Council (SCC) to ensure that wider transport measures are delivered, in particular to increase the use of active travel and public transport and reduce the use of private vehicles,

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

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

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

and to increase the proportions of low and zero emission vehicles where modal shift is not feasible;

- Priority 3 work collaboratively with Heathrow Airport Ltd to address emissions associated with the airport operations;
- Priority 4 to work collaboratively within SBC, across Surrey, with neighbouring London Boroughs and with wider stakeholders such as National Highways and the Environment Agency to reduce emissions of particulate matter and NOx from a range of sources within and out with the borough; and
- Priority 5 report on an annual basis to Defra the implementation of the measures set out in this report, as well as monitored concentrations within the AQMAs.

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 Spelthorne Borough Council's direct influence.

## **Responsibilities and Commitment**

This AQAP was prepared by Air Quality Consultants Ltd and Spelthorne Borough Council with the support and agreement of the following departments and wider stakeholders:

- Strategic Planning (SBC);
- Climate Change and Sustainability (SBC);
- Transport (SCC);
- Public Health (SCC);
- Environmental Health (SBC);
- Neighbourhood services / fleet (SBC);
- Leisure (health and wellbeing and active travel) (SBC);

- Heathrow Airport Ltd; and
- National Highways.

This AQAP will be approved by the Environment and Sustainability Committee. Specific measures which need external input, such as that relating to Heathrow Airport and transport measures which require Surrey County Council input have been agreed separately with those stakeholders.

This AQAP has not been signed off by a Director of Public Health.

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

If you have any comments on this AQAP please send them to Pollution Control at:

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# 1 Introduction

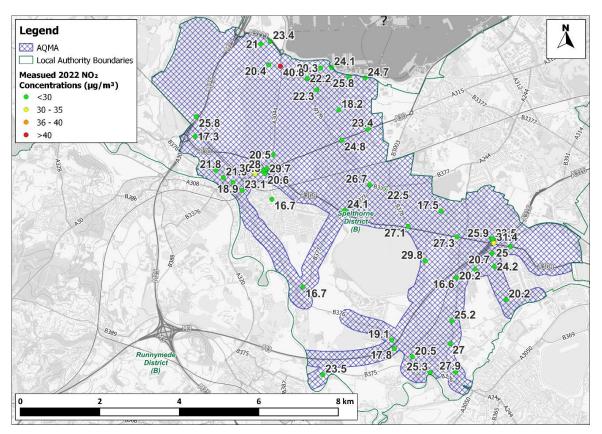
This report outlines the actions that Spelthorne Borough Council will deliver between 2024 and 2029 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to the Spelthorne administrative area.

It has been developed in recognition of the legal requirement on the local authority to work towards Air Quality Strategy (AQS) objectives under Part IV of the Environment Act 1995 and relevant regulations made under that part and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

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 Spelthorne Borough Council's air quality ASR.

# 2 Summary of Current Air Quality in Spelthorne

Air quality in Spelthorne is generally good when compared with national air quality objectives. A whole borough AQMA was declared in Spelthorne in 2003 for exceedances of the annual mean nitrogen dioxide (NO<sub>2</sub>) objective. The AQMA was reduced in size in 2024 because of sustained improvements in local air quality. Figure 1 illustrates annual mean NO<sub>2</sub> monitoring data for 2022 within Spelthorne (as compared to an annual mean air quality objective of 40 µg/m<sup>3</sup>). These monitoring sites are part of a wider monitoring strategy across the borough, for both NO<sub>2</sub> and PM<sub>10</sub>.



# Figure 1 Spelthorne AQMA showing 2022 annual mean monitored NO<sub>2</sub> concentrations

In Spelthorne, there was a marginal exceedance of the annual mean NO<sub>2</sub> objective within the AQMA on Stanwell Moor Road in 2022. This location is adjacent to a heavily trafficked road leading to the Heathrow Southern Perimeter Road, Terminal 5, and the M25.

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The monitoring site (diffusion tube) is 2.2 m from the road, and the nearest dwelling is set back over 11 m from the road on the opposite carriageway, and hence would be much lower than the air quality objective where the objective applies. At all other monitoring sites within Spelthorne, concentrations have been below the objective.

Concentrations of  $PM_{10}$  remained below the annual mean objective of 40 µg/m<sup>3</sup> and the 24-hour mean of 50 µg/m<sup>3</sup> not to be exceeded more than 35 times a year. Concentrations of  $PM_{2.5}$  were below the UK Limit Value of 20 µg/m<sup>3</sup>, for all monitoring sites in Spelthorne during 2022. Whilst the requirements of national legislation are met, addressing local sources of particulate pollution remains an important component of air quality management given the health impacts of particulate matter.

All measurements are subject to uncertainty, and data from diffusion tubes are adjusted in relation to the laboratory and preparation method (a process termed bias adjustment) in order to improve the accuracy of annual means. However, Defra in recognition of this inherent uncertainty, recommend that the revocation of an AQMA should only be considered following three consecutive years of annual mean nitrogen dioxide concentrations being lower than 36  $\mu$ g/m<sup>3</sup> (i.e., 10% below the annual mean objective). In addition, pollutant concentrations may vary significantly from one year to the next, due to the influence of meteorological conditions, and Spelthorne Borough Council should be reasonably certain that any future exceedances (that might occur in more adverse meteorological conditions) are unlikely, before revoking an AQMA. This AQAP takes into account these inherent uncertainties, while also taking a proportionate approach.

Spelthorne Borough Council's Annual Status Reports can be found at <u>https://www.spelthorne.gov.uk/article/17839/Air-quality-reports</u>.

## 2.1 Pollutants and Health Effects Relevant to Spelthorne

Poor air quality is associated with several adverse health impacts. Vulnerable members of society, including children, the elderly, and those with preexisting heart and lung conditions, are most at risk to poor impacts from air pollution.

The main pollutants of concern within Spelthorne Borough are NO<sub>2</sub>, predominantly from transport emissions, PM<sub>10</sub> and PM<sub>2.5</sub>.

# **3** Spelthorne'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 (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).

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.

This AQAP will complement work underway at County level. Public Health staff have drafted the <u>Joint Strategic Needs Assessment</u> (JSNA) which is an assessment of the current and future health and social care needs of the local community. The JSNA informs the <u>Health and Wellbeing Strategy</u> (HWS) 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 <u>Public Health Outcome Framework</u> (PHOF) for England recognises the burden of ill health resulting from poor air quality. PHOF Indicator D01 reports that 6.8% of

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deaths in Spelthorne during 2022 were attributable to particulate matter ( $PM_{2.5}$ ) (undertaken using the 'new method'), which is slightly higher than the Surrey (6.2%) and the England (5.8%) average.

# **3.2 Planning and Policy Context**

#### 3.2.1 Local Plan

The <u>Spelthorne Borough Council Core Strategy and Policies Development Plan</u> <u>Document</u> (2009) has a key objective to "secure an improvement in the Borough's air quality", and there are several policies which refer to air quality.

- Strategic Policy SP6 "Maintaining and Improving the Environment";
- Strategic Policy EN3: "Air Quality";
- Strategic Policy SP7: Climate Change and Transport;
- Policy CC1: Renewable Energy, Energy Conservation and Sustainable Construction;
- Policy CC2: Sustainable Travel;

The council is currently working on a new draft <u>Local Plan for 2022 to 2037</u>; however, this has not yet been adopted. Within the new draft local plan, there are several policies which refer to air quality.

- Policy PS1: Responding to the climate emergency;
- Policy PS2: Designing places and spaces;
- Policy SP7: Heathrow Airport;

The main relevant policy is Policy E4: Environmental Protection Air Quality, which states:

"1) The Council will seek to protect and improve the Borough's air quality and work towards meeting the World Health Organisation Air Quality Guidelines by ensuring all development proposals prevent further deterioration of existing poor air quality and are "air quality neutral" as far as reasonably practicable. 2) An applicant will be required to submit an air quality assessment for development proposals where development... <meets the criteria as set out in Policy E4>:

3) For development proposals that could potentially cause, exacerbate or introduce new exposure to poor air quality, mitigation and compensation measures should be incorporated. Mitigation is required to ensure that all major developments are sustainable from an air quality perspective and for the protection of public health. Where on site measures alone are not possible or are insufficient to reduce the impact on air quality, applicants should consider the scope for mitigating the impact by contributing to funding of other initiatives that improve air quality.

4) Planning permission will not be granted for proposals where adverse effects on air quality for existing receptors and/or future occupiers are of a significant scale, either individually or in combination with other proposals and/or the effects cannot be appropriately and effectively mitigated."

When referencing air quality neutral, the emerging local plan goes on to say that:

"Individual developments are often shown to have a very small air quality impact. The cumulative impact of many individual schemes, deemed insignificant in themselves, can contribute to a 'creeping baseline'. Therefore, good practice to reduce emissions and exposure should be incorporated into all developments\* at the outset, at a scale commensurate with the emissions. Consideration of air quality neutrality should focus on both NOx, and PM<sub>10</sub> emissions, the energy sources used within buildings and emissions from the vehicles associated with use of the development. Mitigation measures to reduce emissions may be applied on-site or off-site however the exposure of residents to poor air quality may still result in refusal without sufficient mitigation in order to protect public health."

The new draft local plan, which will fully replace the existing Core Strategy and Policies Development Plan Document, will be accompanied by a Climate Change Supplementary Planning Document (SPD). The Climate Change SPD is currently going through the committee approval process, and includes checklists for Minor and Major applications. The checklists set out all the potential measures which could be included in development schemes, including checklists for Energy, Transport, Construction and Waste, Green Infrastructure, Water, and Space and Place Design.

#### 3.2.2 Climate Strategy and Action Plan

Spelthorne Borough Council declared a climate emergency in October 2020. The Council plans to be net zero for Scope 1 and 2 emissions by 2030 (in line with Surrey County Council's Greener Futures Delivery) and has produced a climate change strategy to help achieve this aim. The <u>Spelthorne Climate Change Strategy and</u> <u>Action Plan 2022-2030</u> was approved and adopted in 2022. The Spelthorne Borough Council Climate Change Strategy identified Council vehicles being the predominant source of the organisation's emissions. Key actions within the Climate Change Strategy and Action Plan which will also benefit air quality include:

- Reducing emissions from government buildings and operations;
- Reducing emissions from transport within Spelthorne;
- Creating sustainable transport in Spelthorne; and
- Help develop sustainable communities in Spelthorne where social, environmental, and financial resources meet current needs while ensuring that adequate resources are available for future generations.

Within the Climate Change Strategy and Action Plan, there are numerous Actions which will work towards reducing air pollution. Actions relevant to air quality have been incorporated into Section 5 and are outlined in Table 5.1. Collaborative working across the Climate Change Strategy and Action Plan, and the Air Quality Action Plan will be strengthened.

It should also be noted that the predicted increase in hot dry summers as a result of climate change is likely to increase local air pollutant concentrations. Changes in weather patterns, particularly temperature, rainfall and wind speed, <u>are expected to have an effect</u> on dispersal and concentrations of Particulate Matter and ozone, with local increases in ozone exacerbated during heatwaves. Therefore, provision of localised alerting and monitoring will become particularly important. This highlights the need for collaborative working across both climate and air quality to reduce emissions of Greenhouse Gases and local air pollutants.

#### 3.2.3 Health and Wellbeing Action Plan

Spelthorne published their <u>Health and Wellbeing Action Plan 2022-2024</u> in 2022. Within this, there are two Actions which are relevant to Air Quality:

*"Work to reduce air pollution through promoting air alert system, specific campaigns e.g. anti-idling/bonfires/Clean Air Day and write the air quality action plan"* 

And to:

"Plant more trees to promote biodiversity, air quality, reduce flooding and clean air"

#### 3.2.4 Electric Vehicle Infrastructure Plan

Spelthorne Borough Council has adopted an <u>Electric Vehicle Infrastructure Strategy</u> <u>2023 to 2030</u>, in response to the Climate Change Strategy which outlined a key action to further improve EV infrastructure throughout the borough and develop an EV infrastructure strategy. One of the strategic objectives within the EV strategy is to:

*"Improve the air quality through reducing harmful pollutants attributed to internal combustion vehicles, nitrous oxide* [sic], and particulate matter."

SBC have set a number of objectives to achieve transition to EVs, including as a local authority and employer, as a taxi licensing authority, in accordance with Building Regulations and as a landowner, car park operator and landlord.

#### **3.2.5 Local Transport Plan**

Surrey County Council's fourth <u>Local Transport Plan</u>, (LTP4) sets out plans for transforming Surreys transport network from 2022 up to 2032 and beyond, including changes required to achieve net zero emissions by 2050. SCC are committed to significantly transforming transport networks to meet this national target and LTP4 sets out the following key themes:

- 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.

#### 3.2.6 Surrey Climate Change Strategy

Surrey's <u>Climate Change Strategy 2020</u> and the more recent <u>Climate Change</u> <u>Adaptation and Resilience Strategy 2023</u> (known as "Surrey Adapt") set out Surrey's collective approach with the Boroughs and Districts to reducing greenhouse gas emissions and adapting to climate change.

#### **Council Emissions**

In relation to Council emissions, Strategic Priority 2 (SP2), that all council-owned vehicles, including SCC-owned bus fleet, to be zero carbon by 2030 or sooner is the most relevant to this AQAP.

#### Transport

In relation to transport and air quality, the strategy takes a three-pronged approach of reducing journeys, shifting to an increased use of public and active transport modes, and developing zero emission vehicle options. This approach is consistent with the aims of this AQAP, hence collaboration with SCC's transport team in the preparation of this document. There is a target for 60% emission reduction in the Transport sector by 2035 against 'Business As Usual' as a minimum. Strategic priorities are:

- Strategic Priority 1 (SP1) Prioritise investment in place-based development that creates well-connected communities close to high quality places, spaces and services to reduce the number and length of car journeys for all residents.
- Strategic Priority 2 (SP2) Invest in initiatives and infrastructure to increase the uptake of walking, cycling and public transport, alongside schemes to

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reduce reliance on the car for example ultra-low emission zones, pedestrianisation and car-free zones.

• Strategic Priority 3 (SP3) - Invest in and support the development of the infrastructure required to support the move to zero emission vehicles for journeys that cannot be made on foot, by bicycle or public transport.

#### **Housing and Planning**

The Strategy focuses on improving the energy efficiency of buildings, which would also reduce NOx emissions from gas boilers. Additionally, Strategic Priority 3 (SP3) minimises transport emissions by promoting residential development that is sustainably located and allows safe and easy access for residents to existing services and transport hubs.

#### 3.2.7 Surrey Joint Strategic Needs Assessment

The Joint Strategic Needs Assessment (JSNA) is an assessment of the current and future health and social care needs of the population of Surrey. The JSNA informs the Health and Wellbeing Strategy (HWS) which outlines the collective health priorities for all partners across Surrey. The JSNA adopts a 'chapter' structure, where each chapter describes the needs around a specific area of health and social care. There is to be a chapter on air quality within this new structure.

#### 3.2.8 Heathrow 2.0

Heathrow Airport Ltd is the owner and operator of Heathrow Airport, immediately to the north of Spelthorne. Whilst the airport is not within the boundaries of the Council, the operation of the airport, particularly in terms of surface access transportation, does impact on the Borough. Heathrow Airport Ltd is a private company and not a public body, and hence the obligations upon them are not the same as other organisations that Spelthorne collaborates with to improve air quality. Nevertheless, the company is committed to reducing the impact of it's operations, and published it's Sustainable Growth Strategy – Heathrow 2.0 (Heathrow Ltd, 2022) in 2022.

The strategy sets out goals to achieve by 2030 based around two pillars:

**Net zero aviation** to work towards our vision of sustainable aviation at Heathrow and across our industry.

A great place to live and work to improve the quality of life of our colleagues and our neighbours and make a positive impact in our community.

Net zero goals will have associated reductions in air pollutants, but the strategy has a specific goal for air quality:

*Clean air at and around the airport.* Goal by 2030: Reduce NOx airside by 18% compared to 2019

To work towards this Heathrow have set 5 targets:

- At least 45% of passengers using public transport by 2026;
- No more than 57% of colleague single occupancy vehicle trip mode share by 2026;
- By 2026 increase the use of public transport by 25% for the UK population visiting the airport and located within 1.5 hours and by 12% for those living within 3 hours;
- By 2030 all airport vehicles are zero emission or use biofuels; and
- An airside ULEZ in place by 2025.

SBC Officers engage with Heathrow on air quality through membership of the Council for the Independent Scrutiny of Heathrow Airport (CISHA), Air Quality Working Group <u>https://www.cisha.org/forums</u>.

#### 3.2.9 Wider actions

There are two actions already underway that have not been included as specific actions in the AQAP. However, they are likely to positively impact on air quality within Spelthorne. These measures are discussed below.

#### A3 Guildford scheme to encourage uptake of EV

Guildford Borough Council undertook analysis of the traffic using the Guildford section of the A3 and proposed initiatives to improve emissions. Although the

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proposed initiatives are targeted at Guildford they will provide useful experience that can be applied across Surrey in the future and the resulting increased number of electric vans on the road is likely to benefit Surrey more widely, both in giving confidence of appropriate charging infrastructure across the county and that vehicles will travel more widely than Guildford.

The work has identified that:

- most vehicles using the Guildford A3 section are making journeys which do not start or end in Guildford;
- 80% of the NOx emissions are from diesel vans and cars; and
- vans make up 15% of traffic but account for 45% of emissions.

These findings suggest that just targeting local vehicle users will not lead to the required improvements to air quality around the A3. As a result, an <u>A3 EV grant</u> funding programme is run by Surrey County Council.

#### Impacts of the London ULEZ expansion on Spelthorne

Spelthorne borders three London boroughs; Hounslow, Hillingdon, and Richmond upon Thames. As such the expansion of the ULEZ to the London Boundary will potentially affect air quality in Spelthorne, both in terms of re-routing of traffic and fleet changes.

The ULEZ expansion has led to some improvements to transport for staff to and from Heathrow Airport which is now situated within the charging zone, in order that staff with non-compliant vehicles can still get to work without using their vehicles. These include a coach service for staff from Basingstoke that will run along the M3, a new H21 Bedfont bus, increased frequency on the 442 service via Stanwell and Ashford, and reintroduction of the X442 service from Staines Railway Station. These measures could reduce the volume of non ULEZ compliant vehicles travelling through Spelthorne, by providing an alternative to getting to Heathrow on public transport.

However, there has been an increase in airport related taxi and private hire vehicles waiting in Stanwell and Stanwell Moor. This could be because they are non ULEZ compliant vehicles. Spelthorne has recently <u>consulted on a Public Space Protection</u> <u>Order</u> containing measures to help address this.

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In time it is likely that residents and businesses in Spelthorne, by virtue of the proximity of London and the need to travel in and out of the ULEZ charging zone, will upgrade to ULEZ compliant vehicles. This will accelerate the fleet turnover to newer vehicles with lower emissions which will benefit local air quality. Vehicles traveling from London to Spelthorne benefit from the TfL scrappage scheme, which may improve the fleet travelling out of London.

Now that the ULEZ is in place the offset between any re-routing, and fleet improvements can be monitored. It is difficult to isolate the effects of the expanded ULEZ on air quality monitoring data due to many policies to improve air quality being implemented simultaneously, in combination with other elements affecting concentrations such as the weather. However, the London-wide Ultra Low Emission Zone First Month Report does indicate some improvements to the fleet as a result of the ULEZ. Vehicle compliance in the expanded outer London area is now 95.2%, up from 85.1% in May 2022 when the consultation on proposals to expand the ULEZ London-wide launched, and from 90.9% in June 2023. Generally, London's air quality is improving, as set out in the report <u>Air Quality in London 2016-2024</u>. Preliminary figures indicate that annual average concentrations of NO<sub>2</sub> in London dropped to the lowest levels ever recorded in 2023, lower even than the first year of COVID-19 lockdowns. 2023 was also the first year since records began when annual mean particulate matter (PM<sub>2.5</sub>) concentrations did not exceed the latest interim World Health Organization (WHO) air quality target across London's active air quality monitoring sites.

### **3.3 Source Apportionment**

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within Spelthorne Borough Council's area. Two source apportionment exercises have been undertaken at different times, the most recent by Ricardo (as summarised in the 2023 ASR pg. 75-78 <a href="https://www.spelthorne.gov.uk/article/17839/Air-quality-reports">https://www.spelthorne.gov.uk/article/17839/Air-quality-reports</a>), at 7 areas across the borough which were identified as locations most likely to exceed air quality objectives. The second was part of a Surrey wide modelling exercise undertaken by CERC with a baseline of 2017.

#### 3.3.1 Spelthorne Modelling (Ricardo 2022)

Where annual mean pollutant concentrations close to, or in excess of, the air quality objectives were modelled in 2019, source apportionment was undertaken at up to three worst-case receptors in each study area. As there were no modelled exceedances of the PM<sub>10</sub> or PM<sub>2.5</sub> annual mean objectives; source apportionment was undertaken for NOx only. The outcomes of the source apportionment analysis are summarised below:

#### In Sunbury

- exceedances of the NO<sub>2</sub> annual mean objective were predicted at ground level receptor locations at Vicarage Road, Staines Road West and Green St in 2019; all of which are located close to junctions where average traffic speeds are likely to be low;
- the largest proportions of NOx were attributable to background concentrations;
- diesel cars account for the largest proportion of road NOx concentrations (approximately 33% of total NOx); and
- at relevant locations, compliance was predicted by 2022.

#### In Staines

- The maximum ground level concentrations have been predicted along London Road and near the Crooked Billet Roundabout, with compliance predicted by 2022;
- the largest proportions of NOx were attributable to background concentrations;
- Diesel cars account for the largest proportion of road NOx concentrations (ranging from 33%-42% of total NOx) with buses contributing 12%-14% of total NOx emissions.

#### In Georgian Close

- modelling results indicate that exceedances of the air quality objectives are highly unlikely;
- The largest proportion of NOx was attributable to background concentrations (68%);

• The highest proportion of road NOx was attributable to diesel cars (19% of total NOx).

In Ashford

- No exceedances of the NO<sub>2</sub> annual mean objective were predicted at any receptor location in Ashford ;
- Similarly to the other locations, the largest proportion of NOx is due to background, and diesel cars account for the largest proportion of road NOx concentrations (7%-13% of total NOx emissions).

In Lower Halliford – Shepperton

- NO<sub>2</sub> annual means exceedance was predicted at one ground level residential receptor locations on Walton Bridge Road, with compliance predicted by 2021;
- Similarly to the other locations, the largest proportion of NOx is due to background, and diesel cars account for the largest proportion of road NOx concentrations (36%-42% of total NOx emissions);
- LGVs contributed to 9%-16% of NOx emissions on Walton Bridge Road and the Upper Halliford Bypass.

In Moor Lane

- There was one exceedance of the NO<sub>2</sub> annual mean objective at a first-floor residential property at the junction of Church St and Bridge St in 2019 only;
- Similarly to the other locations, the largest proportion of NOx is due to background, and diesel cars account for the largest proportion of road NOx concentrations (24%-26% of total NOx emissions);
- LGVs contributed to 12-23% of NOx emissions on the M25 and Bridge St, but only 2% on the A30.

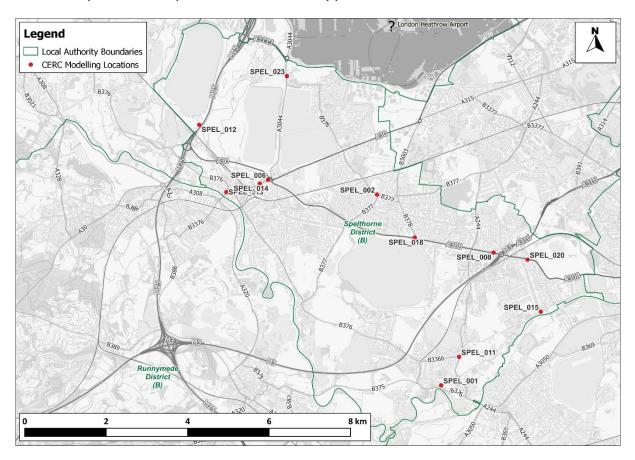
In summary,

• The largest proportions of NOx were attributable to background concentrations (ranging from 30%-68%), which are not under the control of SBC, but highlight the importance of partnership working, including regionally and more widely;

 diesel cars account for the largest proportion of road NOx concentrations (ranging from 19%-42%).

#### 3.3.2 Surrey Wide Modelling (CERC 2019)

A source apportionment exercise was carried out by <u>CERC as part of a wider</u> <u>modelling study across Surrey</u> in 2019 using a base year of 2017. Figure 2 shows the locations where the source apportionment was undertaken. Although the data are based on 2017 emissions, It is considered that for the purposes of targeting actions, the work presented below will represent the sources of relevance. It should be noted that the AQAP includes a measure to update the Surrey wide modelling of air quality, which will provide an update to the source apportionment work.



#### Figure 2 CERC Source Apportionment Locations

#### NO<sub>X</sub> emissions

Figure 3 and Figure 4 show source apportionment at diffusion tube sites in Spelthorne for NO<sub>X</sub> in 2017 based on modelling undertaken across Surrey by CERC.

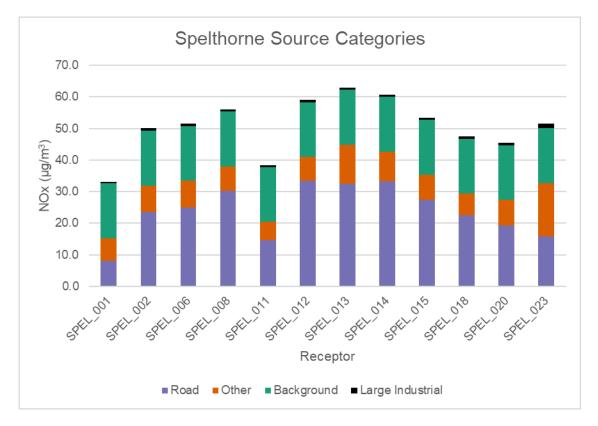
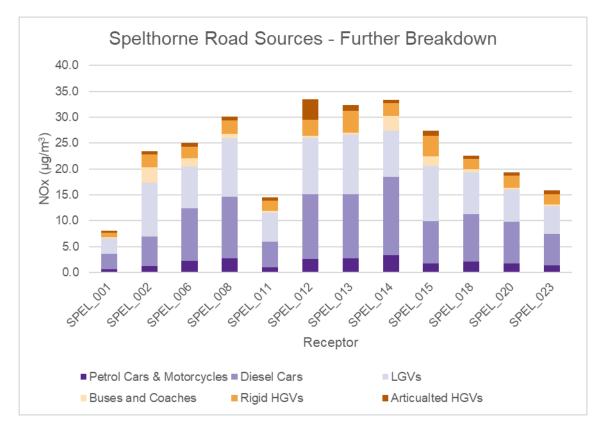


Figure 3 Total NO<sub>x</sub> Modelled Source Apportionment (2017)



#### Figure 4 NO<sub>x</sub> Road Traffic Breakdown (2017)

Figure 3 shows that, as would be expected at roadside monitoring locations, road traffic was the largest source of  $NO_X$  emissions in Spelthorne Borough at the majority of locations. At some sites background emissions were the greatest contributor to  $NO_X$  concentrations.

Large industrial sources contributed a very little amount (<1.4%) to NOx concentrations at measurement locations within Spelthorne.

Although, at the time that this modelling was undertaken, the EcoPark in Shepperton was not in place, it should be noted that regulated industrial installations are required under permit terms to mitigate pollutant emissions to air. This installation is permitted by the Environment Agency, who have noted in consultation as part of this AQAP that the permit issued to the site is regularly inspected by EA staff and emissions from the gasification process remain within the emission limits set out in the permit and the associated legislation. The Environment Agency currently rate the environmental performance of permitted sites using compliance bands which go from band A for a good site to band F for a poorly performing site. The EcoPark site currently sits in compliance band B for 2022 and the Environment Agency expect the

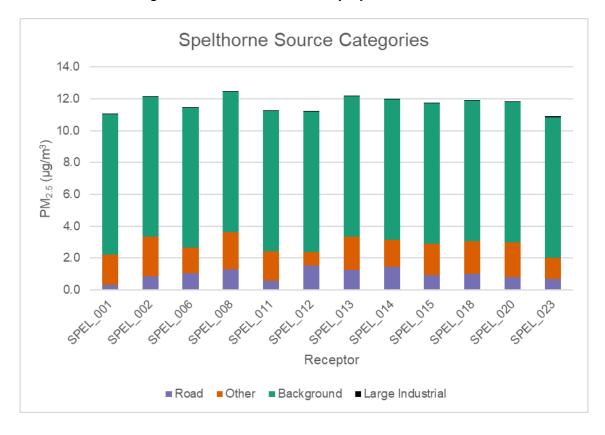
site to be compliance band A for the year 2023. It is therefore unlikely that this source will give rise to a significant source of emissions.

From the CERC modelling, 'Other' contributions to NO<sub>x</sub> concentrations were on average 18% across Spelthorne. However, this was notably higher at site SPEL\_023 on the A3044 close to Heathrow (see Figure 2), where 'other' contributed 33% of NO<sub>x</sub> concentrations. This is to be expected as airport emissions are included in the 'other' category.

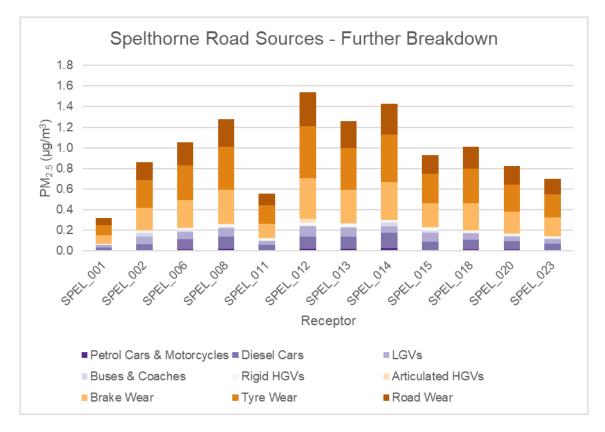
Figure 4 shows that of the road traffic components contributing to  $NO_x$  concentrations within Spelthorne, diesel cars were on average the greatest contributor to road traffic emissions (38%), followed by LGVs (35%). It is likely that since 2017, the proportion of diesel cars has reduced, but LGVs may have increased.

#### 3.3.1 PM<sub>2.5</sub> emissions

Figures 5 and 6 show source apportionment at the same sites for  $PM_{2.5}$  in 2017 based on modelling undertaken across Surrey by CERC



#### Figure 5 PM<sub>2.5</sub> Source Apportionment



#### Figure 6 PM<sub>2.5</sub> Road Traffic Emissions Breakdown

Figure 5 shows that the largest source of PM<sub>2.5</sub> is 'Background', contributing on average 75% of PM<sub>2.5</sub> concentrations across Spelthorne and reflecting the transboundary nature of this pollutant. Road sources contribute on average less than 8% to PM<sub>2.5</sub> concentrations in Spelthorne. Of the road sources Figure 6 shows that the largest contributor to emissions is tyre wear on average (32%), followed by brake wear (26%) and road wear (21%), with tailpipe emissions making up only a small proportion of PM<sub>2.5</sub> emissions from road sources. Large Industrial sources contribute less than 0.3% on average to PM<sub>2.5</sub> concentrations in Spelthorne.

#### **3.3.2 Source Apportionment Summary**

For 2017 the CERC modelling showed that generally the largest contribution to NOx concentrations at roadside locations was from road traffic. The Ricardo modelling in 2019 showed that generally the largest contribution was from background sources. The differences in modelling methodology may account for some of this difference, but it is also indicative of the national trend towards lower vehicle emissions, with the Ricardo modelling having been undertaken in a later year (and hence with cleaner

vehicle fleet). Although background concentrations will also have reduced, proportionally, this will not have been as great a reduction as for vehicle emissions. When looking at the road emissions in more detail, both the CERC and Ricardo assessments showed that diesel vehicles were the largest contributor to NOx emissions.

#### 3.3.1 River Emissions

River emissions have been identified as a potential source of both NOx, PM<sub>10</sub> and PM<sub>2.5</sub> with regards to diesel pleasure boats. This particular source is not incorporated into the above modelling, and there is a lack of information generally on vessels on inland waterways, and therefore it is difficult to assess what contribution they may be making. It is likely that while individual river boats can be significant sources of air pollutant emissions, mainly due to the age and simplicity of their engines, together their impact on local air quality is likely to be small.

Defra, in 2019, had a Call for Evidence on those vessels operating domestically in the UK, the aim of which, as set out in the Clean Air Strategy, is: "...to collect a body of evidence that will allow us to understand more clearly the extent of emissions from vessels which do not currently fall within the remit of environmental regulations, which are currently mainly based on UK implementation of international conventions." The outcomes of this Call for Evidence have not been published, and SBC is aware of work within central London with regard to retrofitting inland commercial vessels with an after-exhaust treatment. SBC will investigate the feasibility of extending monitoring to incorporate sites close to the River, and will keep abreast of any improvements in evidence with regards to quantifying and reducing emissions from diesel inland boats.

## **3.4 Required Reduction in Emissions**

As the air quality objectives are currently (2022) being met at relevant locations in Spelthorne, there is no specific reduction in emissions required. However, as noted previously, although compliance with air quality objectives is important, from a health perspective, a general reduction in emissions of the key pollutants (including PM<sub>10</sub> and PM<sub>2.5</sub>) may provide better health outcomes than focussing on hotspot locations. For this reason, wider, more strategic measures have been included and the Council Spelthorne Borough Council Air Quality Action Plan - 2024 21 will be working towards ongoing improvements in pollutant concentrations below the current air quality objectives.

The most recent modelling exercise (carried out by Ricardo with modelled concentrations for 2019) concluded that all areas of the Borough that were modelled were predicted to have concentrations below the objective for NO<sub>2</sub> by 2022 at the latest, which is supported by the monitoring for 2022.

Given the above, while this document is an AQAP required in relation to the declared AQMA, strategic measures are included to improve air quality in the Borough more widely which also reflects the priorities of the Council as outlined below.

## 3.5 Key Priorities

The air quality objectives have been achieved at relevant locations since 2020, however the need to reduce concentrations, even below the current air quality objective level is recognised, in order to maximise health improvements.

In terms of NO<sub>2</sub>, road transport is the largest source and therefore in order to reduce NO<sub>2</sub> concentrations, reductions need to focus particularly on diesel vehicles, mainly cars and LGVs, and to a lesser extent HGVs. At some locations, the airport is also a contributor to overall emissions and collaborative working with Heathrow Airport Ltd will continue to reduce this source.

For PM<sub>2.5</sub> background (i.e. non-road) concentrations are the largest contributor to overall concentrations. This 'background' concentration includes large contributors to primary PM<sub>2.5</sub> concentrations, such as domestic solid fuel burning, which have not been explicitly modelled. PM<sub>2.5</sub> has a wide range of sources and in order to assist with reductions in PM<sub>2.5</sub>, SBC will be introducing measures to reduce greenhouse gas emissions (which should also reduce PM<sub>2.5</sub> due to a reduction in combustion) and ensure that domestic solid fuel burning is further addressed through information campaigns.

In terms of traffic related  $PM_{2.5}$ , Figure 6 shows that the majority of emissions are from brake, trye and road wear, rather than from the tailpipe. For this reason, the switch to electric vehicles will not reduce particulate matter to the same extent as it does for nitrogen dioxide, although the use of regenerative braking in electric

vehicles will help reduce brake wear. Nevertheless, actions are included to reduce the growth in vehicle use (for example by encouraging active forms of travel). It is noted that secondary particulate matter (formed by chemical reactions in the atmosphere) is an important source of both PM<sub>10</sub> and PM<sub>2.5</sub>. The Council are mindful that there is likely to be emerging guidance from Government on reducing PM<sub>2.5</sub> emissions through the planning system, which may also include precursors (chemicals that react in the atmosphere to form secondary particulate matter), which will also be implemented as required.

As a result of the source apportionment outlined above, the following priorities have been identified:

- Priority 1 to maintain air pollutant concentrations below current air quality objectives and where practicable, reduce emissions further to work towards WHO Guideline Values;
- Priority 2 to work collaboratively with SCC to ensure that wider transport measures are delivered, in particular to increase the use of active travel and public transport and reduce the use of private vehicles, and to increase the proportions of low and zero emission vehicles where modal shift is not feasible;
- Priority 3 work collaboratively with Heathrow Airport Ltd to address emissions associated with the airport operations;
- Priority 4 to work collaboratively within SBC, across Surrey, with neighbouring London Boroughs and with wider stakeholders such as national Highways and the Environment Agency to reduce emissions of particulates and NOx from a range of sources within and out with the borough; and
- Priority 5 report on an annual basis to Defra the implementation of the measures set out in this report, as well as monitored concentrations within the AQMAs.

# 4 Development and Implementation of Spelthorne Borough Council AQAP

# 4.1 Consultation and Stakeholder Engagement

In developing this AQAP, we have worked with Surrey County Council, National Highways, Heathrow Airport Ltd, other local authorities (through the Surrey Air Alliance), 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. Consultation based on this document will be undertaken both online and directly with wider stakeholders listed in Table 4.1.

The response to the consultation stakeholder engagement will be given in Appendix A: Response to Consultation in future versions of this report.

Consultee	Consultation Undertaken					
The Secretary of State	Yes, draft report to be submitted to Defra					
The Environment Agency	Yes, invited to Steering Group Meeting, feedback given prior to the meeting					
The highways authority	Yes, Surrey County Council transport key member of Air Quality Steering Group					
All neighbouring local authorities	Yes, through Surrey Air Alliance and neighbouring London Boroughs will be consulted on as part of the wider public consultation					
Other public authorities as appropriate, such as Public Health officials	Yes, through Surrey Air Alliance					

#### Table 4.1 – Consultation Undertaken

#### Spelthorne Borough Council

Consultee	Consultation Undertaken					
Bodies representing local business interests and other organisations as appropriate	Will be undertaken through online consultation					

## 4.2 Steering Group

A Steering Group was set up in order to take this Action Plan revision forward.

A Steering Group meeting was held on 6<sup>th</sup> March 2024 facilitated by Air Quality Consultants Ltd. Attendees represented a wide range of stakeholders and Council departments. In attendance were representatives of:

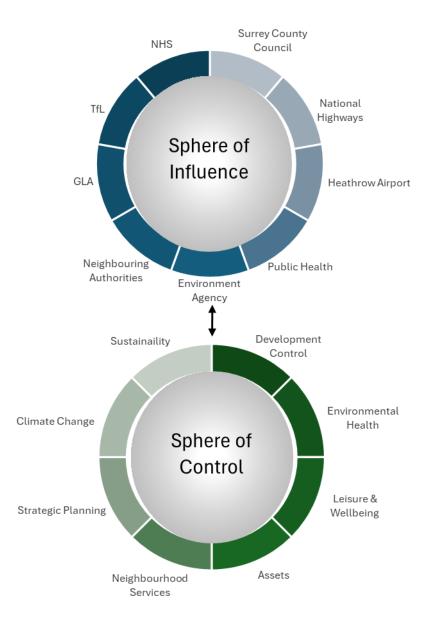
- Strategic Planning (SBC);
- Climate Change and Sustainability (SBC);
- Transport (SCC);
- Environmental Health (SBC);
- Neighbourhood services / fleet (SBC);
- Leisure (health and wellbeing and active travel) (SBC);
- National Highways.

A separate meeting was held with representatives from Heathrow Airport Ltd and feedback on measures was also received from the Environment Agency. A members briefing has also been held as part of the consultation process.

Discussions have focused on each of the categories of actions and sought updates on current actions and new actions were also discussed.

It should be noted that as a tiered authority, Spelthorne Borough Council has a limited sphere of control and a wider sphere of influence. Figure 7 sets out the spheres of influence and control, which have been taken on board for measures within the AQAP.

#### Spelthorne Borough Council



#### Figure 7 Spheres of Influence and Control

# 5 AQAP Measures

The measures included in this AQAP reflect the priorities of SBC, which focus primarily on strategic measures, including; those to reduce emissions from traffic through modal shift to active travel, those working in the longer term to reduce the need to travel, delivery of actions to increase low and zero emission vehicles in the fleet, raising awareness and reducing emissions from commercial and domestic heating sources. Many of the actions to reduce a range of sources of emissions are not within the control of SBC and hence a theme of this document is ongoing collaborative working with other organisations including Surrey County Council, Heathrow Airport Ltd, National Highways, and across neighbouring local authorities in Surrey and London, through both improvements in policy and direct actions.

Table 5.1 shows the Spelthorne 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

Table 5.1 – Air Quality	Action Plan Measures
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Measu re No.	Measure	Category	Classifica tion	Estimate d Year Measure to be Introduce d	Estimate d / Actual Completi on Year	Organisations Involved	Funding Source	Defra AQ Gran t Fund ing	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	Work within the structure of the planning system to reduce emissions of pollutants from new development. This will include implementing any new requirements for reducing PM <sub>2.5</sub> through planning which are likely to be in place within the timeframe of this plan	Policy Guidance and Developme nt Control	Air Quality Planning and Policy Guidance	2012	2032	SBC Environmental Health, SBC Development Planning, SBC Building Control, SCC Transport Strategic Transport Team	Each department and organisation has officers in post funded by the respective Council budgets	NO	Fully funded	£100k - £500k	Implementat ion	Reduced vehicle emissions, heat and energy plant emissions and construction dust emissions.	Measured concentration of NO <sub>2</sub> at monitoring locations.	Ongoing implementation through regulatory and planning and development functions. Required amount of EV charging is now stipulated in Part S of the Building Control Regulations (2022) – conditions no longer required. Both Spelthorne and SCC have new guidance with air quality benefits <sup>4</sup> .	2023 Emerging Local Plan examination hearings are currently paused <sup>5</sup> . The Emerging Local Plan includes updated planning policy regarding air quality that will not be effective until the Plan is adopted. Planning conditions relating to air quality cannot be applied to some change of use applications and permitted developments.
2	Establishment of a Climate Change Working Group	Policy Guidance and Developme nt Control	Air Quality Planning and Policy Guidance	2021	2032	SBC	SBC	NO	Funded - within staffing budgets	n/a	Implementat ion	Ultimate target is reductions in greenhouse gas emissions	To promote sustainable transport amongst the staff. Support residents and	Working Group meets every 2 months to track progress of actions. Establishing funding sources for projects to reduce emissions such as the Green Initiative Fund.	The River Thames Scheme Development Consent Order is a project to create additional flood capacity along the River Thames in Spelthorne and

#### Spelthorne Borough Council

<sup>4</sup> Surrey Council have updated the Vehicular, electric vehicle and cycle parking guidance for new developments which is now available online here: https://www.surreycc.gov.uk/roads-and- transport/parking/strategy-andguidance/development-parking-guidance. Spelthorne Borough Council have adopted a Supplementary Planning Document which is designed to complement planning policy regarding climate change and emissions reduction. Some of the measures within the document will have co benefits for air quality.

<sup>&</sup>lt;sup>5</sup> 2023 Emerging Local Plan examination hearings were suspended for 3 months at the request of Councillors. The examination was due to resume in September 2023 however Members voted to extend the pause in the examination timetable until the proposed changes to the National Planning Policy Framework were published in December 2023, before determining the next steps and taking legal advice to confirm the validity of the minister's directive to intervene in the Local Plan process under section 27 of the Planning and Compulsory Purchase Act 2004. On the 29th February 2024 the Spelthorne Environment and Sustainability Committee voted to propose to the Inspector to remove all Green Belt allocations from the Local Plan with the exception of the two allocations that meet the need for Gypsy, Traveller and Travelling Showpeople. The Committee resolved to propose to the Inspector to keep all proposed flood risk sites but remove those at high risk of flooding and move some higher risk sites to later in the Plan period (11-15 years) to allow the River Thames Scheme to be operational and effective, the design code to be completed, and subject to no resolution objection from the Environment Agency and to propose to the Inspector to withdraw the Staines Development Framework as a core document. These decisions will allow the resumption of examination of the Local Plan in due course, subject to consultation with the Inspector and the Environment Agency.

Measu re No.	Measure	Category	Classifica tion	Estimate d Year Measure to be Introduce d	Estimate d / Actual Completi on Year	Organisations Involved	Funding Source	Defra AQ Gran t Fund ing	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
												which have associated air pollutant emissions reductions	businesses to adopt clean vehicles and car-sharing. Promoting sustainable travel <sup>6</sup> .	Introducing a Climate Change focussed Supplementary Planning Document <sup>7</sup> . Rolling out Carbon Literacy training for Councillors and Staff <sup>8</sup> Identifying synergies between achieving GHG emissions and reductions in air pollutant emissions. Spelthorne are an active participant in the Heathrow Strategic Planning Group, a joint partnership of local authorities and Local Enterprise Partnerships (LEPS) responsible for planning the land use, transport, environment, economic development and sustainable development of the sub- region surrounding Heathrow Airport. Spelthorne are also an active participant in the Council for the Independent Scrutiny of Heathrow Airport (CISHA), including within the Air Quality Working Group.	neighbouring boroughs which is required due to climate change. The Environmental Health team are a regulatory consultee to this DCO and the DCO process is expected to take significant resource to respond to from the Pollution Control team, who manage the Councils LAQM duties. Actions are dependent on funding being available.
3	Update the Surrey-wide Air Quality Modelling which was completed in 2019 to	Policy Guidance and Developme nt Control	Other policy	2026	2027	SCC, Surrey Public Health and SBC (via Surrey Air Alliance)	SCC, Surrey Public Health and SBC (via	Possi bly	Not Funded	£10-£50k (for Spelthorne)	Planning	N/A	Receipt of updated Surrey-wide air quality modelling of	No progress	Action depends on suitable traffic data being available from SCC and funding being available from SBC in a timely manner to join in with the

<sup>&</sup>lt;sup>6</sup> including actively supporting improvements to public transport access to Heathrow and sustainable travel to school.

<sup>&</sup>lt;sup>7</sup> SBC has sought advice from experts within the Association for Public Service Excellence in setting policy.

<sup>&</sup>lt;sup>8</sup>This training supported by the Carbon Literacy Trust requires participants to identify emission reduction actions that they will undertake as part of their role. As of March 2024, 86 employees have undertaken the training.

Measu re No.	Measure	Category	Classifica tion	Estimate d Year Measure to be Introduce d	Estimate d / Actual Completi on Year	Organisations Involved	Funding Source	Defra AQ Gran t Fund ing	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
	incorporate up to date input data						Surrey Air Alliance)						NOx, PM <sub>10</sub> and PM <sub>2.5</sub>		wider modelling exercise. At Spelthorne funding needs to clear Committee which is a long process compared with other Surrey Boroughs and can present challenges when joint working.
4	Lobby for, and support any future measures by Transport Authorities to encourage and facilitate the use of low emission buses in Spelthorne	Promoting Low Emission Transport	Public Vehicle Procurem ent - Prioritising uptake of low emission vehicles	Ongoing	Ongoing	Spelthorne Borough Council, SCC, TfL	Within staff resources for lobbying, funding sources for low emission buses unclear	NO	Not funded	Unclear	Planning	Unclear at this stage	Proportion of Low Emission Buses in Spelthorne	Introduction of electric buses in Sunbury (235 & 290) on both London United routes. First bus <sup>9</sup> are ISO 14001@2015 certified for Environmental Management and are committed to achieve a 100% zero emission bus fleet by 2035. TFL requires buses on its routes to comply with the LEZ including via retrofitting older vehicles. SCC Bus Service Improvement Plan outlines improvements required to increase patronage, reliability, journey speed and customer satisfaction.	Funding. Bus companies have no requirement to upgrade fleet, so will require collaborative working. Charging is also a challenge.
5	Develop a Green Infrastructure strategy to support the Local Plan	Policy Guidance and Developme nt Control	Other policy	2024	2024	Senior Strategic Planning Officer/CCT		NO				Very difficult to quantify	Delivery of Green Infrastructure Strategy	Some consultant work being carried out by APSE Plans to develop in 2024.	

<sup>9</sup> who currently operate the number 8 route through Staines to Slough

Measu re No.	Measure	Category	Classifica tion	Estimate d Year Measure to be Introduce d	Estimate d / Actual Completi on Year	Organisations Involved	Funding Source	Defra AQ Gran t Fund ing	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
6	Promote access to grant funding for renewable energy installations for residents including Solar Together	Promoting Low Emission Plant	Emission control equipment for small and medium sized stationary combustio n sources / replaceme nt of combustio n sources	Ongoing	Ongoing	SCC	Solar Together	NO	Funded	£10-£50k (for Spelthorne) for implementat ion of any future scheme	Implementat ion	Households with solar energy are likely to utilise generated electricity for heating the home, which can reduce boiler and domestic solid fuel burning emissions. Very difficult to quantify	Households joining the Solar Together scheme.	Solar Together Surrey is a group-buying scheme that leverages homeowners' collective purchasing power to access quality installations of solar photovoltaic (PV) panels at discounted prices <sup>10</sup> . Phase 2 of Solar Together Surrey launched in 2023 and is managed by SCC in partnership with independent experts, iChoosr, who will administer and deliver the scheme. The scheme is currently closed to new applications at the present time <sup>11</sup> .	This relies on homeowners to sign up for the scheme.
7	Incorporate energy efficiency measures and renewables into conversions, refurbishments, and maintenance of Council buildings and housing developments	Promoting Low Emission Plant	Low Emission Fuels for stationary and mobile sources in Public Procurem ent	Ongoing	ongoing	SBC (Assets/Faciliti es/CCT)	Public Sector Low Carbon Skills Fund	NO	Partially Funded	>£10 million	Implementat ion	Difficult to quantify in terms of local air pollutant emissions	Delivery of specific Council building schemes - Knowle Green Office LED lighting upgrade. Increase in EPC ratings	Solar PV now on all 3 main operational buildings. Knowle Green Office in line for LED lighting upgrade. Subject to budgets there are plans to increase EPC ratings <sup>12</sup> . <u>SBC has been awarded £994,883 by the</u> <u>Government and Sport</u> <u>England</u> to decarbonise Sunbury Leisure Centre by adding solar panels to the roof and replacing the old gas boilers with heat pumps. Gas usage at the	Budget

<sup>11</sup> The 1st Phase in 2021 featured approximately 1,400 installations, with 5.6MW of installed capacity. This will deliver over 28,000 tonnes of carbon savings over 25 years.

<sup>12</sup> Have completed 98% of EPC surveys for all council sites against requirements of the Minimum Energy Efficiency Standards.

<sup>&</sup>lt;sup>10</sup> The more people that participate, the better the price that can be secured and the more renewable energy generated by Surrey residents. Participants receive support throughout the process, with clear and objective communication at every stage. The offer is a complete solar PV system, including survey, installation, monitoring and warranties. Additionally, the scheme only collaborates with certified solar PV installers to ensure high-quality installations with insurancebacked guarantees.

Measu re No.	Measure	Category	Classifica tion	Estimate d Year Measure to be Introduce d	Estimate d / Actual Completi on Year	Organisations Involved	Funding Source	Defra AQ Gran t Fund ing	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
8	Converting 50% of the Council fleet to electric or hydrogen by 2028 as stated in SBC's response to the Climate Emergency	Promoting Low Emission Transport	Company Vehicle Procurem ent - Prioritising uptake of low emission vehicles	Ongoing	2029	SBC(Neighbou rs Services/ CCT)	From Council budget (currently no other potential sources of funding)	NO	Partially Funded	£500k-£1 million for vehicles plus £300k to £400k for infrastructur e in the depot to increase the power supply	Implementat ion	Difficult to quantify in terms of overall local air pollutant emissions	50% of the Council fleet to electric or hydrogen by 2028	centre will be reduced to zero as a result of the work. In 2023 the Council took on an electric minibus as one of the Spelride service vehicles that provide community transport services in Spelthorne. 2 EV pool cars, 2 EV vans, 2 EV mopeds are already utilised in the SBC fleet.	There are some challenges in replacing some specialist Council vehicles such as refuse trucks, the Council has trialled electric vehicles and unfortunately experienced reliability issues to date. Also funding issues for EVs. Power supply to depot locations requires upgrading to facilitate adequate charging facilities.
9	To investigate the feasibility of producing annual emissions data for the Councils fleet vehicles in line with the Council's Climate Change Strategy	Promoting Low Emission Transport	Other	Ongoing	Early 2024	Pollution Control/ Neighbourhood Services/CCT/ SCC	From Council budget	NO	Partially Funded	£35k per annum	Planning	Emissions savings will be quantified	No KPI set currently	A pilot study of the baseline emissions for the refuse vehicles in the fleet was undertaken in 2023 by the Surrey Environment Partnership. Weekly mileage data is collected by Neighbourhood Services which could be used for further studies.	Funding.
10	Investigate the feasibility of introducing emissions-based parking tariffs	Promoting Low Emission Transport	Priority parking for LEV's	2025 (for feasibility)	2026	Spelthorne Borough Council/ SCC		NO	Not funded	£10-£50K	Planning	n/a for feasibility work	Feasibility study complete	No progress to date	Funding, staff resource. SBC can no longer enforce on street parking. Potential barrier to implementation of Equalities and Diversity.
11	Promote the use of "cleaner technology and fuels" within Spelthorne	Promoting Low Emission Transport	Procuring alternative Refuelling infrastruct ure to promote Low Emission Vehicles, EV recharging , Gas fuel recharging	2019	2025	SCC and SBC (via Surrey Air Alliance), planning applicants and developers	Enterprise M3 Local Enterprise Partnership & SBC (including S.106), Developers via the Planning regime, ORCS and LEVI	NO	Partially Funded	-	Implementat ion	A reduction in NOx pollution from traffic through the uptake of low emission vehicles and reduced private car ownership	Suitable Charging Locations identified, and Preferred Supplier selected. Provision of car club vehicles at new development s in	Location suggestions for EV chargers were submitted to a <u>consultation run by SCC</u> which suggested 82 locations in Spelthorne, 45 on street, 37 off- street. These are being used to guide the installation of further phases. Ten charge points have installed as part of Phase	Future developments in Staines-upon-Thames may present an opportunity to fund and introduce improvements. There is not suitable SBC owned land in the area of the Borough closest to Heathrow Airport and Stanwell Moor Road where the 2022 NO <sup>2</sup> exceedance occurred to facilitate off -

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							funding for charge points						Spelthorne. Number of charge points delivered.	1 of the Joint Project with SCC. In 2023, SBC produced an EV infrastructure strategy. Planning applicants are asked to commit to electric car clubs through agreed planning conditions. A working group is being established to investigate the provision of Rapid Charging Hubs in Spelthorne. On-street EV trial with SCC. SBC are investigating the business case feasibility of providing initial EV rapid hub charging to two Council owned car parks. SCC has established a contract with Connected Kerb to deliver EV charge points between now and 2030.	area requires resource from SCC.
12	Deliver EV taxi programme to encourage taxi companies and drivers to invest in electric fleets	Promoting Low Emission Transport	Taxi emission incentives	2020	2026	SBC (CCT)	Pilot scheme funding from DEFRA via a joint project with	YES	Partially Funded	£100k - £500k	Planning	A reduction in NOx and particulate pollution from taxi and private	Increased number of licensed EV taxi and private hire vehicles.	SBC amended the taxi and private hire vehicle licencing policy to accommodate fully electric vehicles in 2022. The policy was also amended to allow electric London	Lack of legal resource in local authorities to support the procurement process has led to repeated delays <sup>13</sup> .

<sup>13</sup> The project was delayed by the impacts of the Covid-19 pandemic upon the taxi and private hire trade and suppliers. Further delays were caused by changes to state subsidy control legislation which required a legal opinion and further Defra approval. Defra approval to continue was granted in March 2023. By this time, the match funding source LoCase had expired. New match funding has been allocated however it is less finance than originally committed (although still meeting the criteria of the original grant) therefore further approval to continue was sought from Defra. Approval to continue with the project was given in Autumn 2023. SCC were unable to provide the services to the project that were originally committed, due to additional funds being required to resource the legal and procurement work needed to start the project procurement, therefore the feasibility of transferring these responsibilities to Guildford Borough Council to deliver it as a project partner is being explored.

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							the Surrey Air Alliance. Match funding from SCC and a small contribution from Environmen tal Health budget at some of the participating Local Authorities					hire vehicles.		Style cabs or those with Euro 6 standard engines to operate in Spelthorne to improve accessibility of the taxi fleet for disabled customers.	
13	Supporting air quality research and providing public information regarding air quality, including an air alert for vulnerable members of the population	Public Information	Other	2021	<del>2023</del> 2029	Spelthorne Borough Council, Surrey Air Alliance and CISHA Air Quality Working Group	Project dependant	NO	Not Funded	-	Implementat ion	Input to air quality related research	Data available to the Council and other parties in projects	Initial project completed August 2022 <sup>14</sup> The Council's Pollution Control Team have in 2023 and 2024 hosted the Environmental Diagnosis and Management Masters students from Royal Holloway University to share knowledge about Local Air Quality Management and air quality monitoring <sup>15</sup> . Through membership of CISHA Air Quality Working Group SBC are helping to facilitate	Maintaining a collaborative relationship with the local University helps to train future air quality professionals and scientists, whilst enhancing knowledge about local air quality. Provision of air quality alerts is reliant on the funding of the service by multiple Surrey districts and boroughs, and the provision on offer by service providers. It is expected that a new

<sup>&</sup>lt;sup>14</sup> Initial project completed August 2022 co- supervising a student from the Earth Science Department at Royal Holloway University of London. The student project provided mobile vehicle and buggy mounted spot measurements of NO<sub>2</sub>, CO<sub>2</sub> and methane around the borough.

<sup>&</sup>lt;sup>15</sup> This is to encourage interest in this specialist area of work and associated research. The students then undertake their own monitoring study facilitated by the University having visited both diffusion tube and automatic analyser locations in Spelthorne.

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														research into local air quality and air quality in relation to aviation and related sources of emissions <sup>16</sup> . The Surrey Air Alliance have produced online materials regarding wood burning stove emissions and SBC have run information campaigns regarding domestic burning and engine idling. SBC will keep up to date with emerging technologies such as hydrogen as a fuel source. SBC will continue to provide an <u>air quality alert</u> <u>service</u> that residents can sign up to aimed at residents with health conditions that are affected by episodes of poor air quality.	provider may be required for autumn 2024.
14	Continue to lobby at national /regional level for the legislation changes needed and on the big strategic infrastructure decisions such as Heathrow Airport's third runway and changes to the regulation and operation of UK airspace	Public Information	Other	Ongoing	Ongoing	MAT/SCC	Within staffing budgets (staff time only)	NO	Funded (staff time only)	<£10K	Implementat ion	Will depend on specific proposals, but potential for sizeable emission reductions in the long term	n/a	SBC is active on HSPG Environment Group	Competing resource priorities

<sup>&</sup>lt;sup>16</sup> Spelthorne have facilitated a meeting between the CISHA Air Quality Working Group Chair and a local university in autumn 2023 to explore potential synergies in areas of research interest.

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15	Raising awareness of poor air quality and the associated health implications. NHS Ask About Asthma campaign. Engaging with the charity and voluntary sector to align efforts on tackling the climate emergency and improving air quality.	Public Information	Via other mechanis ms	2022	2025	Surrey and Heartlands Health and Care partnership, SCC and SBC (via the Surrey Air Alliance)	NHS and Spelthorne Borough Council	NO	Funded		Implementat ion	n/a - measure about reducing exposure not reducing emissions	Training of healthcare professionals including GPs and Pharmacists Support of Clean Air Day and Clean Air Night established by the charity Global Action Plan	Ask About Asthma initiative: Surrey Heartlands Health and Care Partnership have worked with the Surrey Air Alliance to understand where there are schools located in areas of potential poor air quality and to understand how the air pollution forecasts can help asthma patients prepare for deteriorating air quality to help best manage their health condition. Healthy Surrey have produced an <u>online</u> asthma toolkit which gives advice for parent/carers, schools, and medical professionals. In June 2023 SBC attended NHS training to provide information about air pollution alert services <sup>17</sup> . SBC supports Clean Air Day and Clean Air Night, a bid has been made to the Defra Air Quality Fund by Surrey Trading Standards and the Surrey Air Alliance in cooperation with a wider group of Local Authorities	The project has highlighted that rehousing requirements do not capture individuals who have respiratory conditions very well. Due to the common nature of asthma as a health condition it would not be possible to rehouse patients to new accommodation in areas of better air quality in Surrey. Overcrowding assessments cannot consider health conditions and that can be a challenge in making a case for changing a family's housing when there may be a health need to do so. The NHS funding is of a limited timescale but the project will leave a legacy of online resources and staff training. The Surrey Public Health and Environmental Health Teams will continue to share data and work with Surrey

<sup>&</sup>lt;sup>17</sup> The Spelthorne Principal Pollution Control Officer attended a training event held by Surrey Heartlands for NHS staff, school nurses and pharmacists to improve outcomes of children and young people with asthma. The Officer was in attendance on behalf of the Surrey Air Alliance to provide information about air pollution alert services and the Defra Air Quality Index forecasts to the attending medical professionals.

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16	Implement further Liveable Neighbourhoods , or similar schemes	Traffic Manageme nt	Strategic highway improvem ents, Re- prioritising Road space away from cars, including Access managem ent, Selective vehicle priority, bus priority, high vehicle occupancy lane	2022	Ongoing	SCC, Spelthorne Borough Council	SCC	NO	Partially Funded	-	Planning	Very difficult to quantify as will be dependent on specific scheme - will reduce emissions where a modal shift to active travel is successful.	Improved public health indicators, improved facilities for walking and cycling	for funding to carry out activities to promote Clean Air Night more widely <sup>18</sup> . Tranche 1A is the first batch of <u>Liveable</u> <u>Neighbourhoods</u> zone proposals. There are 27 Liveable Neighbourhood Zones across SBC <sup>19</sup> .	Heartlands Health and Care Partnership via the <u>Surrey Air Alliance</u> Currently at the design stage. Subject to funding bids and allocations. Perception that people need to drive further.
17	Junction improvements to increase capacity and improve road	Transport Planning and Infrastructur e	Other	2020	2025	SCC, planning applicants and developers	Developers via the Planning regime	NO	Funded	£500k - £1 million	Implementat ion	Very difficult to quantify as dependent on specific	Reduced congestion on Borough roads reduced	Shepperton Studios: two junctions have been completed, with another junction improvement in progress (due for	There are a <u>number of</u> <u>concurrent roadworks</u> <u>taking place</u> in SBC which collectively cause temporary traffic

<sup>&</sup>lt;sup>18</sup> The first Clean Air Night took place in January 2024 with a social media campaign focus on educating the public on wood and solid fuel burning and the associated pollution and harm to health that this activity creates, the Surrey Air Alliance in collaboration with the SCC Public Health and Trading Standards teams were a sponsor of the event having engaged directly with Global Action Plan on raising awareness of this issue.

<sup>&</sup>lt;sup>19</sup> Sunbury Cross is a priority area covered by Liveable Neighbourhood Zone SP7, SP6 and SP1 and a Local Cycling and Walking Plan Phase 1 Core Walking Zone and Phase 1 Cycle Route. There are 27 Liveable Neighbourhood Zones across Sunbury-on-Thames, Staines-upon-Thames, Shepperton and Stanwell, 3 Local Cycling and Walking Plan Phase 1 Core Walking Zones, and a Cycle Routes extending from Sunbury on Thames Green Street and Nursery Road through Sunbury Cross, along the A308 to Ashford Hospital and Laleham with routes extending into Staines-upon-Thames. West Sunbury Local Street Improvements currently being consulted

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	layouts linked to new developments											scheme - will reduce emissions where a modal shift to active travel is successful.	journey times, reduced emissions	completion August 2024). Another 4 junction improvements are planned with all due to be completed by September 2026.	congestion, longer journey times, and interrupt public transport such as bus routes.
18	Promoting Alternative Travel – Delivery of bus priority measures, cycle parking and interchange opportunities	Transport Planning and Infrastructur e	Public transport improvem ents- interchang es stations and services	2016	2030	SCC	SCC	NO	Partially Funded	-	Planning	Very difficult to quantify as dependent on specific scheme - will reduce emissions where a modal shift to active travel or public transport is successful.	Increased uptake in public transport journeys, and cycle journeys	SCC have a dedicated webpage summarising the travel discounts available in Surrey Some attractions in Surrey offer admission discounts when travelling to the attraction with an eligible bus ticket <sup>20</sup> The <u>SCC webpage</u> lists the bus operators who allow free bus pass holders to travel before 9.30am and the London Bus Services which are cashless and accept Oyster. Includes several services that route through Spelthorne including	Public transport by rail and bus remains costly in SBC when compared with neighbouring London Boroughs <sup>22</sup> . Connectivity by public transport to common places of work across Surrey is poor <sup>23</sup> . To date the campaign to get Spelthorne included in transport zone 6 which would substantially reduce public transport fares and allow the implementation of the Oyster scheme on rail in

<sup>&</sup>lt;sup>20</sup> Including: Winkworth Arboretum, Claremont Landscape Gardens, RHS Gardens Wisley, National Trust Hatchlands Park and Waverley Abbey.

<sup>&</sup>lt;sup>22</sup> There is limited control over public transport fares for local authorities. SCC can only influence services that are subsidised but by the nature of requiring that support these routes are more economically challenging to operate. Return tickets for local journeys and to access rail services do not offer value for money for family travel, even when accounting for parking costs. This makes it challenging to encourage residents and businesses to utilise public transport over car travel.

<sup>&</sup>lt;sup>23</sup> For example to Woking and Guildford from Spelthorne, and to destinations outside of Surrey such as Basingstoke and employment areas in West London. Where bus routes are in place services are often infrequent and on very long routes that can be subject to delays, for example travel from Staines to Woking by bus takes over 1 hour whereas by car it takes 30 minutes. Connectivity to hospitals outside the borough by public transport is also poor with 1 service an hour to St Peters Hospital

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														notably some services between Ashford Hospital and Staines-upon- Thames. SBC Local Cycling and Walking Infrastructure Plan (LCWIP) has been produced <sup>21</sup> .	Spelthorne has not yet been successful <sup>24</sup> . Car parking charges have to achieve a balance of providing economic activity in the town centres which are recovering from the economic impacts of the Covid-19 pandemic balanced with the need to improve air quality and reduce carbon emissions in line with the climate emergency <sup>25</sup> .
19	The Council will work with Knowle Green Estate and suppliers to promote retrofit, insulation, energy efficiency and adaptation measures	Promoting Low Emission Plant	Shift to installation s using low emission fuels for stationary and mobile sources		2027	Housing/CCO/ Knowle Green Estates	Social Housing Decarbonis ation Fund	No						Potential for working with Surrey CC on joint bid in the future. Meeting with A2 Dominion (Q4, 2023) highlighted the importance of work needed on social housing.	Would need buy in and support from A2 Dominion, the social housing provider. 50% match funding requirement . The council does not own any housing directly.
20	To investigate the feasibility of introducing Air	Policy Guidance and	Air Quality Planning	2025 (for feasibility)	2026	Spelthorne Borough Council	Unclear - potentially planning	No	Not Funded	£10-50K (including	Planning	Unquantifia ble, but any emissions	Increased consistency	No progress	Resourcing. Co- ordination in with Local Plan update/ process.

<sup>25</sup> Some car parks are privately owned. Currently a flat rate charge of £2 applies to Sunday car parking in certain car parks in Staines-upon-Thames which is popular with families and sustains custom for the local businesses.

<sup>&</sup>lt;sup>21</sup> This is a key transport planning document that has been defined by the Department for Transport (DfT), which aims to support recent uptakes in the active travel modes of walking and cycling by delivering improved facilities for existing active users whilst also encouraging a mode shift for new users. The key outputs for an LCWIP are network plans for key walking and cycle corridors and a prioritised programme of infrastructure improvements at concept design stage.

<sup>&</sup>lt;sup>24</sup> SBC are supportive of this campaign, as is the current Spelthorne MP. SBC wrote to SCC and the Department for Transport regarding the need for lower cost public transport and better public transport connectivity with west London employment areas and Heathrow in line with neighbouring London Boroughs, in light of the London Ultra Low Emission Zone extension. The Department for Transport, and Transport for London did not accommodate this measure which would have provided some mitigation for the impacts of the ULEZ on residents as well as securing further emissions improvements.

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	Quality Supplementary Planning Guidance	Developme nt Control	and Policy Guidance				budgets if professional services are required to deliver the measure.			internal staff time)		reduction will be long term	in air quality assessments		
21	Increase Spelthorne Smoke Control Area to cover the whole borough	Policy Guidance and Developme nt Control	Other policy	2025	2026	Spelthorne Borough Council	Unclear - within staffing budgets	Poten tial for grant fundi ng	Not Funded	<£10K	Planning	Unquantifia ble, likely to have more effect in raising awareness of effects of solid fuel burning	Order approved for whole borough SCA	Officers will attend a Defra workshop giving updated advice on implementing new Smoke Control Areas. This was scheduled for March 2024 but has been cancelled, Officers will attend when the workshop is rescheduled.	Requires Committee approval and a public consultation exercise.
22	To continue to fund a comprehensive air quality monitoring network including automatic monitoring of PM <sub>10</sub> and PM <sub>2.5</sub> .	Public Information	Other	Ongoing	2029 (ie to the end of the plan and beyond)	SBC	Council budgets <sup>26</sup> , Have used Defra grant funding for sensors	Yes (histo rically )	Funded on annual basis	£10-50K	Implementat ion	n/a	Annual Reporting of monitoring Data through the ASR	Monitors in place. Expansion of network will be considered to include some riverside monitoring to consider River Transport.	Funding, staff resource, H&S training for monitoring sites close to the river.
23	Refresh bonfires and anti-idling campaign.	Public Information	Other	2024	2026	SBC	SBC	No	Not funded	<£10K	Planning	Will reduce PM, rather than NOx	Reduction in complaints of bonfires / idling	Complaints regarding bonfires and idling increased post-COVID. Council cannot ban bonfires, but can enforce when statutory nuisance is demonstrated. Increased public awareness that bonfires and idling cause nuisance and unnecessary emissions	

<sup>26</sup> Heathrow independently fund the automatic site at Oaks Road, Stanwell.

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24	Continue to implement Cycling for Health	Promoting Travel Alternatives	Promotion of cycling	2016	2032	SBC and SCC	SBC	NO	Funded	<£10K	Implementat	Very difficult to quantify but will reduce emissions where a modal shift to active travel is successful.	uptake in active travel and local leisure opportunities	may help to reduce the incidence. Scheme in operation with regular guided cycle rides and route suggestions for independent rides <sup>27</sup> . In 2023 there were 123 attendees across 33 rides. SBC are establishing a Coordinated Approach to Cycling Officer group led by the Leisure Service Team to support and promote cycling facilities within the borough. This initiative includes joint working with SCC and a community group Talking Tree, both of which are currently running schemes in Spelthorne to encourage reconditioning of bicycles. SCC have arrangements for reconditioned bicycles to be sold at low cost in the re-use shop at the Community Recycling Centre.	Cycling for Health is an established volunteer led scheme which depends on the community kindly giving their time to run the guided cycle rides. The River Thames Flood Relief Scheme, should the Development Consent Order be granted and the scheme constructed will include extensive new active travel infrastructure including potentially 2 new non vehicle crossings over the River Thames into neighbouring boroughs. Cycle storage difficulties present a barrier to the uptake of cycle ownership. This is a challenge to address both via planning policy for new developments, and in supporting storage provision more widely in the borough.
25	Bikeability School Cycling Proficiency	Promoting Travel Alternatives	Promotion of cycling	2012	2032	SCC	SCC	NO	Funded	-	Implementat ion	Very difficult to quantify but will	Increased uptake in cycle and	SCC offers subsidised Bikeability cycle training to all year 2, year 5 and year	Charged for service paid for by school or parents/carers <sup>30</sup> .

<sup>&</sup>lt;sup>27</sup> There are around 41km of cycle facility in Spelthorne – cycle paths, cycle lanes and advisory routes.

<sup>&</sup>lt;sup>30</sup> Details of how schools can request training can be found here

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	training and Feet First Walking Training											reduce emissions where a modal shift to active travel is successful.	walking journeys made to schools	6 pupils in the Borough and also offers customised cycle training for all ages <sup>28</sup> . Walking Instructors have taught nearly 5,100 primary school pupils in nearly 90 schools across the county in the 2022/23 academic year <sup>29</sup> .	
26	Continue to implement Walking for Health	Promoting Travel Alternatives	Promotion of walking	2016	2032	SBC and SCC	Spelthorne Borough Council	NO	Funded	-	Implementat	Very difficult to quantify but will reduce emissions where a modal shift to active travel is successful.	Increased uptake in active travel and local leisure opportunities	The Spelthorne Walking for Health Scheme, supported by The Ramblers Association, has run for 17 years <sup>31</sup> . SBC has substantial length of Thames Path which passes through scenic areas and is suitable for walking and cycling. There is also a large Site of Special Scientific Interest at Staines Moor which includes walking paths and linkages to the South West London Waterbodies Special Protection Area and the wider <u>Colne</u> <u>Valley Regional Park</u> .	Volunteer led scheme which depends on the community kindly giving their time to run the guided walks. The River Thames Flood Relief Scheme, should the Development Consent Order be granted and the scheme constructed will include extensive new active travel infrastructure including potentially 2 new non vehicle crossings over the River Thames into neighbouring boroughs.
27	Continue to implement School and	Promoting Travel Alternatives	School Travel Plans	2012	2032	SCC	SCC Greener Futures and	NO	Funded	-	Implementat ion	Reduce NOx and PM <sub>2.5</sub>	100% of schools to	<u>SCC are supporting</u> <u>schools to reduce their</u> <u>emissions through 3</u>	Most schools opt to use the funding via the Memorandum of

<sup>&</sup>lt;sup>28</sup> Across Surrey 4,500 pupils have been trained at Bikeability Level 1 (Year 4, 8-9- year-olds) and 6,100 pupils at Bikeability Level 2 (Year 6, 10-11-year-olds) in the 2022/23 academic year.

<sup>&</sup>lt;sup>29</sup> Next academic year, 40 schools have booked Feet First: Walking Training across Surrey.

<sup>&</sup>lt;sup>31</sup> Walks are at least three times per week and average 20 participants per walk. In 2023 there were 280 attendees across 143 walks.

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	Business Travel Plans						the Surrey Air Alliance					emissions and traffic congestion from school related journeys. Very difficult to quantify but will reduce emissions where a modal shift to active travel is successful.	implement travel plans	schemes. The Eco Schools Green Flag scheme <sup>32</sup> , the Mode Shift Stars Travel Plan scheme <sup>33</sup> and Lets Go Zero <sup>34</sup> . Schools sign up to a Memorandum of Understanding to get funding to implement a Mode Shift Stars Travel Plan or an Eco Schools Green Flag <sup>35</sup> . The SCC Safer Travel Team have completed 170 site assessments of Road Safety Outside Schools. In 2022, £3 million was assigned by SCC to deliver infrastructural improvements outside schools in Surrey, with the aim to install new infrastructure outside 50 schools over the next 3 years.	Understanding to improve scooter and cycle parking facilities for the pupils. Engagement with private schools has improved compared with prior to the pandemic. Private schools can have very large catchment areas for pupils

<sup>&</sup>lt;sup>32</sup> Across Surrey there are 88 Green Flag Eco-Schools with 232 schools involved with the program.

<sup>&</sup>lt;sup>33</sup> There are 69 accredited Modeshift STARS Travel Plans in place for schools across Surrey. There are four schools in Spelthorne with accreditations, Ashford Park Primary School, Hawkedale Primary School, St Ignatius Catholic Primary School, and Town Farm Primary School.

<sup>&</sup>lt;sup>34</sup> Currently 3 schools in Spelthorne are signed up to the Let's Go Zero Surrey scheme.

<sup>&</sup>lt;sup>35</sup> Initial work with schools was Defra funded from the Air Quality Fund, this has developed into a larger programme led by the SCC Safer Travel Team. Digital materials from the original grant funded programme are made available to schools in Surrey.

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28	Support work on the Health and Wellbeing Strategy	Promoting Travel Alternatives	Intensive active travel campaign & infrastruct ure	2020	2032	SCC and SBC	SCC and SBC	NO	Funded	£100k - £500k	Implementat ion	Reduce NOx and PM <sub>2.5</sub> emissions from traffic. Very difficult to quantify but will reduce emissions where a modal shift to active travel is successful.	n/a	The Spelthorne Health and Wellbeing Strategy 2022 to 2027 has been adopted by Members at Committee. Active travel will be encouraged to support people's physical health but also positively contribute to reducing air pollution <sup>36</sup> SCCs Health and Wellbeing Strategy includes a commitment that the benefits of healthy environments for people are valued and maximised (including through transport/land use planning) and to support people to reach their potential by addressing the wider determinants of health. Progress is tracked	
29	Continue to promote sustainable transport/ homeworking with staff to reduce travel and explore schemes offering Council employees alternatives to private vehicle use	Promoting Travel Alternatives	Encourag e / Facilitate home- working	Ongoing	Ongoing	SBC (Neighbours Services/ CCT)	within Council budgets	NO	Not funded	£10K-£50K	Implemente d		Proportion of trips to work for SBC employees by private vehicle	Hybrid Working Policy which supports a degree of home working is in place, a salary sacrifice scheme for EVs and bicycles already in place. SBC provide Carbon Literacy Training which encourages staff and Councillors to consider their emissions and travel as an aspect of that. The electric pool vehicles including cars and bikes are promoted to staff	Additional work needed on exploring schemes offering Council employees incentives to avoid car use, and other alternatives to flying such as Climate Perks. Numerous carbon literacy pledges have included a change to travelling to work via active travel.

<sup>36</sup>. Air pollution related mortality is recognised within the strategy as a local challenge and the strategy notes the importance of local cycling and walking infrastructure in improving health and wellbeing. <sup>37</sup> Current progress includes work on a design and feasibility study partially funded by the SBC Greener Initiatives Fund, which aims to set out more detailed proposals for the routes within the Local Cycling and Walking Infrastructure Plan. Currently, the route design is being worked on and traffic surveys and modelling is being undertaken. Phase 2 will be funded from Spelthorne's Surrey Infrastructure Feasibility Study Fund as agreed by Cabinet on the 19th May 2021

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30	Continue collaboration with Heathrow Airport Ltd to reduce emissions arising from the operation of Heathrow Airport.	Policy Guidance and Developme nt Control	Regional Groups Co- ordinating programm es to develop Area wide Strategies to reduce emissions and improve air quality	2024	2030	Spelthorne Borough Council, in collaboration with Heathrow Airport Limited, Heathrow Air Quality Working Group and CISHA Heathrow Area Transport	Various	No	Various	Various	Implementat	Heathrow 2.0 Goals for 2030: Reduce Nox emissions airside by 18% compared to 2019 ; at least a 45% cut in ground carbon emissions.	Achievement of target emissions reductions	regularly and staff are encouraged to use them for site visits/attending meetings where possible. SCC offer the Better Points App to all residents, and this could be promoted to staff, Councillors and residents as part of this action (accrue points on the app towards vouchers or charity donations for choosing active travel, or public transport over car use). https://surrey.betterpoints. <u>app/</u> Heathrow is actively involved in improving public transport including capital measures to support rail connectivity, subsidised public transport for colleagues and other measures as set out in it's Surface Access Strategy. All conventional vehicles owned by Heathrow Airport Ltd are in transit to become carbon zero emission by 2030, with incentives and infrastructure to help other companies make the transition, including the use of HVO. Investment is being made into making buildings low carbon. Sustainable Travel Zone implemented in 2022 to encourage travel to Heathrow by public transport. Providing infrastructure to support zero emission cars and buses. Implementation planning	Heathrow Airport Ltd does not own all the vehicles and buildings that operate at the airport, and as such it dose not have direct control over many of the emission sources associated with the airport operation. However, the company is committed to reducing carbon and NOx emissions (see Heathrow 2.0) and working with the surrounding Local Authorities on potential measures and information sharing. Heathrow Airport Ltd recognises that Spelthorne BC is one of the most impacted areas to emissions from airport freight movements due to the location of the cargo area but has no direct control over the freight operators and

Measu re No.	Measure	Category	Classifica tion	Estimate d Year Measure to be Introduce d	Estimate d / Actual Completi on Year	Organisations Involved	Funding Source	Defra AQ Gran t Fund ing	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
31	Support Traffic Management interventions to reduce road traffic emissions either through smoothing traffic flow or reducing vehicle use	Traffic Manageme nt	Strategic highway improvem ents	2024	2029	SCC, National Highways,	Various	No	Many schemes depende nt on outcome s of other processe s	various	Implementat ion	Dependent on intervention	Delivery of Interventions	for airside ULEZ in 2025. Continuing to monitor air quality. Improvements to signalling at Sunbury Cross Roundabout Capacity and cycle safety improvement not yet funded.	therefore it seeks to influence improvements. Sunbury Cross: changes to the signals are the responsibility of National Highways and so will need to be approved by them. The proposals will need to ensure that any changes to the operation of the off-slips will need to enhance the safety for vehicles exiting the M3/A316 as these are high speed roads. Staines bridge will depend on the review or update of Spelthorne Borough Council's Staines Masterplan.

## **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		

Spelthorne Borough Council Air Quality Action Plan - 2024

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

Action category	Action description	Reason action is not being pursued (including Stakeholder views)			
Environmental Permits	SBC carries out permitting role but judged not to need an action in this AQAP. There is ongoing liaison with Environment Agency who permit larger processes such as the EcoPark.				
Freight and Delivery Management	Freight consolidation	Not considered suitable measure for the AQMA			

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

Spelthorne Borough Council Air Quality Action Plan - 2024

# **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'
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
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 Good Vehicles
HWS	Health and Wellbeing Strategy
JSNA	Joint Strategic Needs Assessment
LAQM	Local Air Quality Management
LGV	Light Goods Vehicle

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LTP	Local Transport Plan
NHS	National Health Service
NO <sub>2</sub>	Nitrogen Dioxide
NOx	Nitrogen Oxides
PHOF	Public Health Outcomes Framework
PM10	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
SBC	Spelthorne Borough Council
SCC	Surrey County Council
SPD	Supplementary Planning Document
ULEZ	Ultra Low Emission Zone
WHO	World Health Organization