Spelthorne Borough Council

Air Quality Action Plan

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

2024

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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 (LAQM) 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_2 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[1]. 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

[1] https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution

equalities issues, because areas with poor air quality are also often the less affluent areas[2,3].

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion[4]. 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[5].
- **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

[2] Environmental equity, air quality, socioeconomic status and respiratory health, 2010

[3] Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

[4] Defra. Abatement cost guidance for valuing changes in air quality, May 2013

[5] World Health Organization (WHO, 2021) at https://www.who.int/news-room/feature-stories/detail/what-are-the-who-air-quality-guidelines, September 2021

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 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 Air Quality Management Areas (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

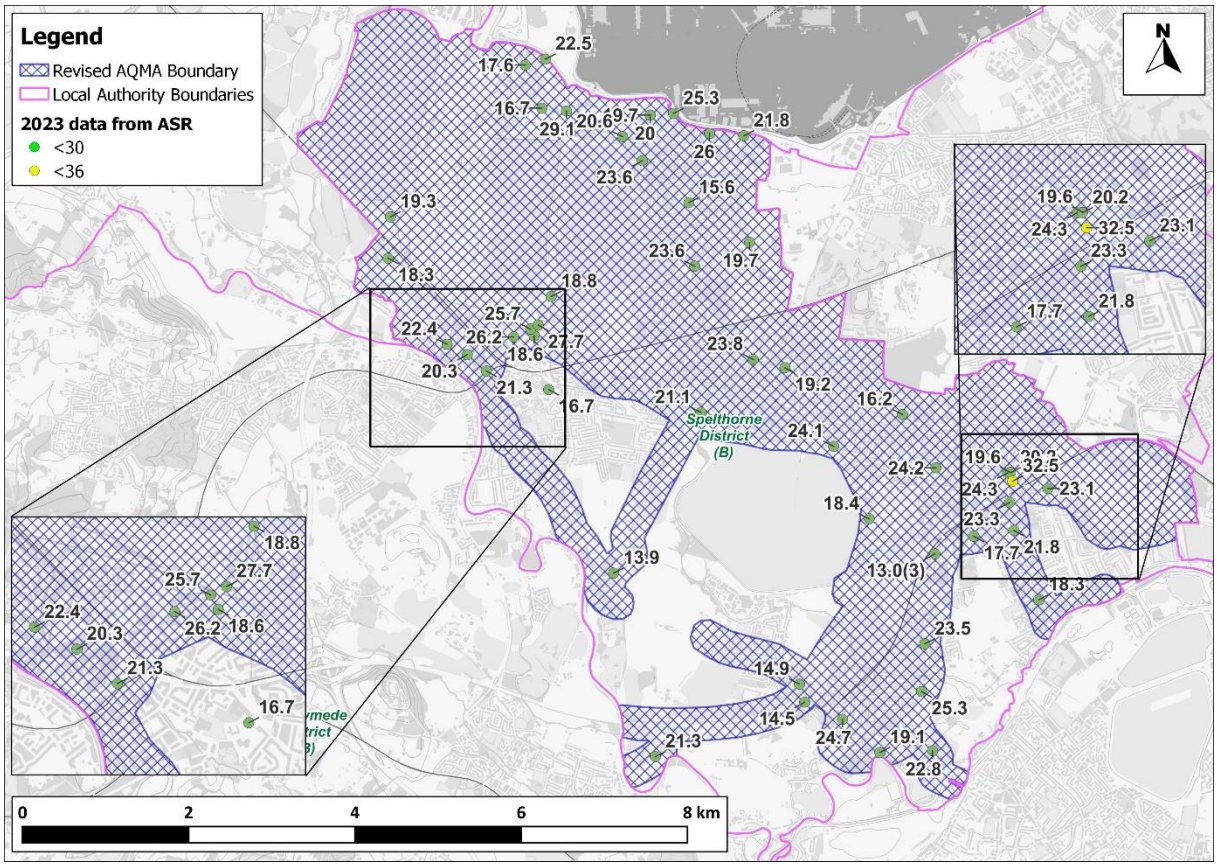
This report outlines the actions that Spelthorne Borough Council will deliver between 2024 and 2029 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to the Spelthorne administrative 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[6] available on the UK government website. A whole borough AQMA was declared in Spelthorne in 2003 for exceedances of the annual mean nitrogen dioxide (NO_2) objective. The AQMA was reduced in size in 2024 because of sustained improvements in local air quality. Figure 1 illustrates annual mean NO_2 monitoring data for 2023 within Spelthorne (as compared to an annual mean air quality objective of 40 µg/m^3). These monitoring sites are part of a wider monitoring strategy across the borough, for both NO_2 and PM_{10}.



[6] https://uk-air.defra.gov.uk/assets/documents/Air_Quality_Objectives_Update_20230403.pdf and https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69336/pb12654-air-quality-strategy-vol1-070712.pdf

Figure 1 Spelthorne AQMA showing 2023 annual mean monitored NO_2 concentrations, all below the air quality objective

In Spelthorne, there was a marginal exceedance of the annual mean NO_2 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.

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.

In 2023, all monitoring sites are below the annual mean NO_2 objective, with even the highest concentration being below 90% of the objective.

Concentrations of PM_{10} remained below the annual mean objective of 40 µg/m^3 and the 24-hour mean of 50 µg/m^3 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^3, 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 µg/m^3 (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 https://www.spelthorne.gov.uk/article/17839/Air-quality-reports.

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_2, predominantly from transport emissions, PM_{10} and $PM_{2.5}$.

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 Joint Strategic Needs Assessment (JSNA) which is an assessment of the current and future health and social care needs of the local community. The JSNA informs the Health and Wellbeing Strategy (HWS) which is a strategy for meeting the needs identified in the JSNA. These are needs that could be met by the local authority, Integrated Care Boards or NHS England. Within the JSNA there is a section on air quality.

The Public Health Outcome Framework (PHOF) for England recognises the burden of ill health resulting from poor air quality. PHOF Indicator D01 reports that 6.8% of 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 Spelthorne's Corporate Plan 2024 - 2028

This plan Corporate Plan [7], '*Putting our residents at the heart of everything we do'* sets out the Administration's priorities over the next five years and defines our goals for the Borough. Our strategic priorities are: (1) community (2) addressing housing need (3) resilience, (4) environment and (5) services. This plan will help protect and enhance our environment as noted in priority (4). SBC aims to improve air quality, reducing noise impacts, enhancing biodiversity across the Borough and working with partners to deliver a greener future.

3.2.2 Local Plan

The Spelthorne Borough Council Core Strategy and Policies Development Plan Document (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.

[7] The Spelthorne's Corporate Plan 2024 – 2028 is available at https://democracy.spelthorne.gov.uk/documents/s60896/CORPORATE%20PLAN%202024-28-New-v22.pdf

- 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 Local Plan for 2022 to 2037; 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_{10} 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 went through the committee approval process on Thursday, 25 April 2024 and includes checklists for Minor and Major applications. Council resolved to approve the adoption of the Climate Change SPD. 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 Spelthorne Climate Change Strategy and Action Plan 2022-2030 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, are expected to have an effect 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 Health and Wellbeing Action Plan 2022-2024 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 Electric Vehicle Infrastructure Strategy 2023 to 2030, 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 Local Transport Plan, (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 Climate Change Strategy 2020 and the more recent Climate Change Adaptation and Resilience Strategy 2023 (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 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 https://www.cisha.org/forums.

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.

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 an improvement in existing coach service[8], comprising an increased frequency on the 442 service (Staines Bus Station – Ashford Hospital – Stanwell – Stanwell Moor – Terminal 5) and the reintroduction of the X442 service from Staines Railway Station to Terminal 5.

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 consulted on a Public Space Protection Order containing measures to help address this.

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 published in Octobre 2023 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 Air Quality in London 2016-2024. Preliminary figures indicate that annual average concentrations of NO_2 in London dropped to the lowest levels ever recorded

[8] https://sbf.biz/improved-bus-links-from-spelthorne-to-heathrow-airport/

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 ($PM_{2.5}$) concentrations did not exceed the latest interim World Health Organization (WHO) air quality target across London's active air quality monitoring sites.

The most recent London-Wide Ultra Low Emission Zone – Six Month Report[9] published in July 2024 confirms that the combined impact of all phases of the ULEZ has contributed to greater overall air quality improvements in London. Harmful NO_2 concentrations alongside roads across all of London are estimated to be 23 % lower on average than they would have been without the ULEZ and its expansions.

Areas outside London are also seeing the benefits of ULEZ policies, as roadside NO_2 concentrations within 5 km of the Greater London boundary were on average 9% lower in 2023 than an estimated "No ULEZ" scenario. Fuller analysis of both emissions and concentrations will be reported in the One Year Report, however this initial analysis indicates that the London-wide ULEZ expansion has had a positive impact on air quality in London.

The impact in Spelthorne is yet to be estimated.

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 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:

[9] https://www.london.gov.uk/sites/default/files/2024-07/London-wide%20ULEZ%20Six%20Month%20Report.pdf

- 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 A3 EV grant funding programme is run by Surrey County Council.

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 https://www.spelthorne.gov.uk/article/17839/Air-quality-reports), 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.

The modelling methods used are available in the reports presented on SBC's website at Air quality - Spelthorne Borough Council. Both studies were completed prior to LAQM Technical Guidance LAQM.TG22[10].

3.3.1 9 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_{10} or $PM_{2.5}$ annual mean objectives; source apportionment

[10] https://laqm.defra.gov.uk/air-quality/featured/uk-regions-exc-london-technical-guidance/

was undertaken for NOx only. The outcomes of the source apportionment analysis are summarised below:

In Sunbury

- exceedances of the NO_2 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 -Staines

- 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_2 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_2 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 – Staines

- There was one exceedance of the NO_2 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 CERC as part of a wider modelling study across Surrey 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.

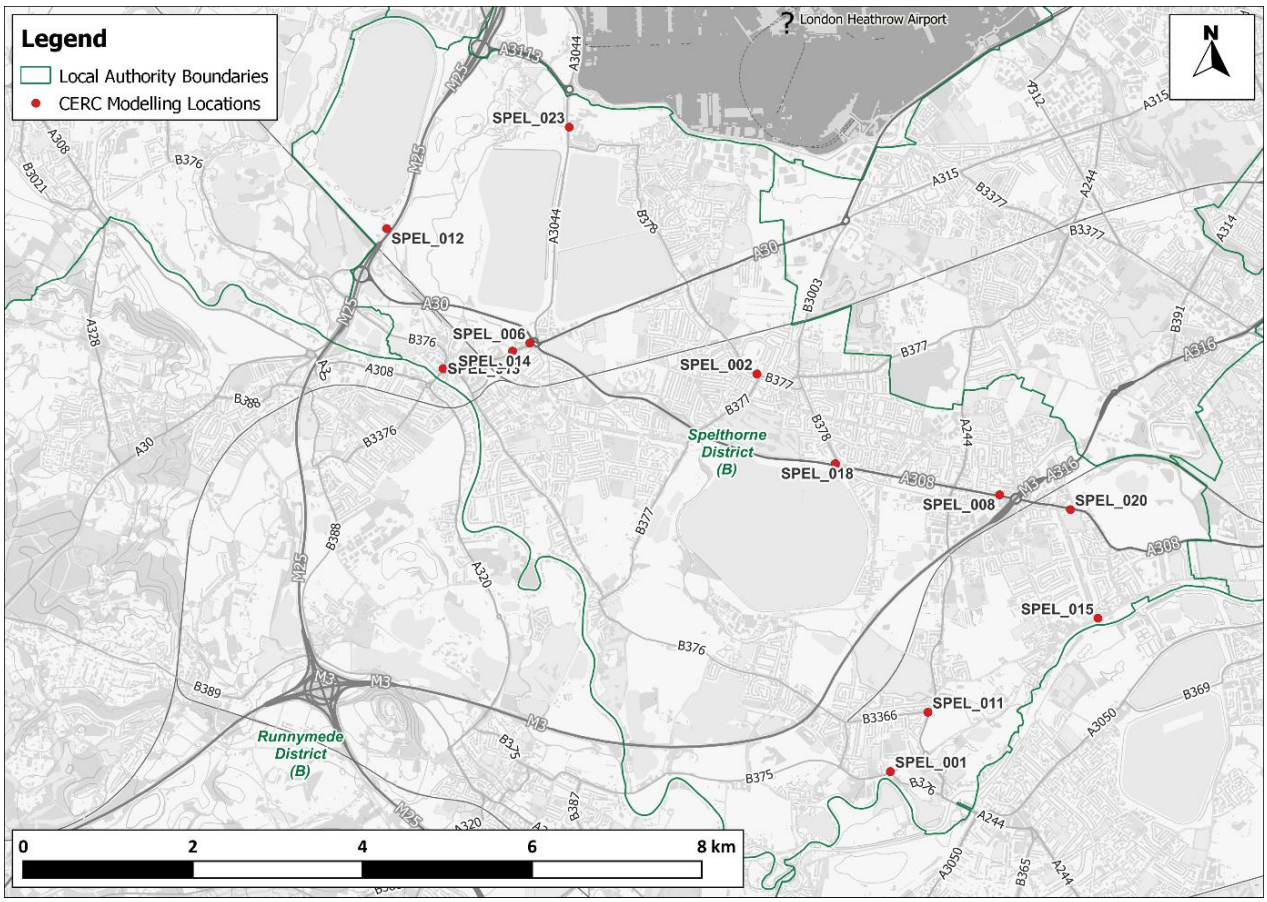


Figure 2 CERC Source Apportionment Locations

NO_X emissions

Figure 3 and Figure 4 show source apportionment at diffusion tube sites in Spelthorne for NO_X in 2017 based on modelling undertaken across Surrey by CERC.

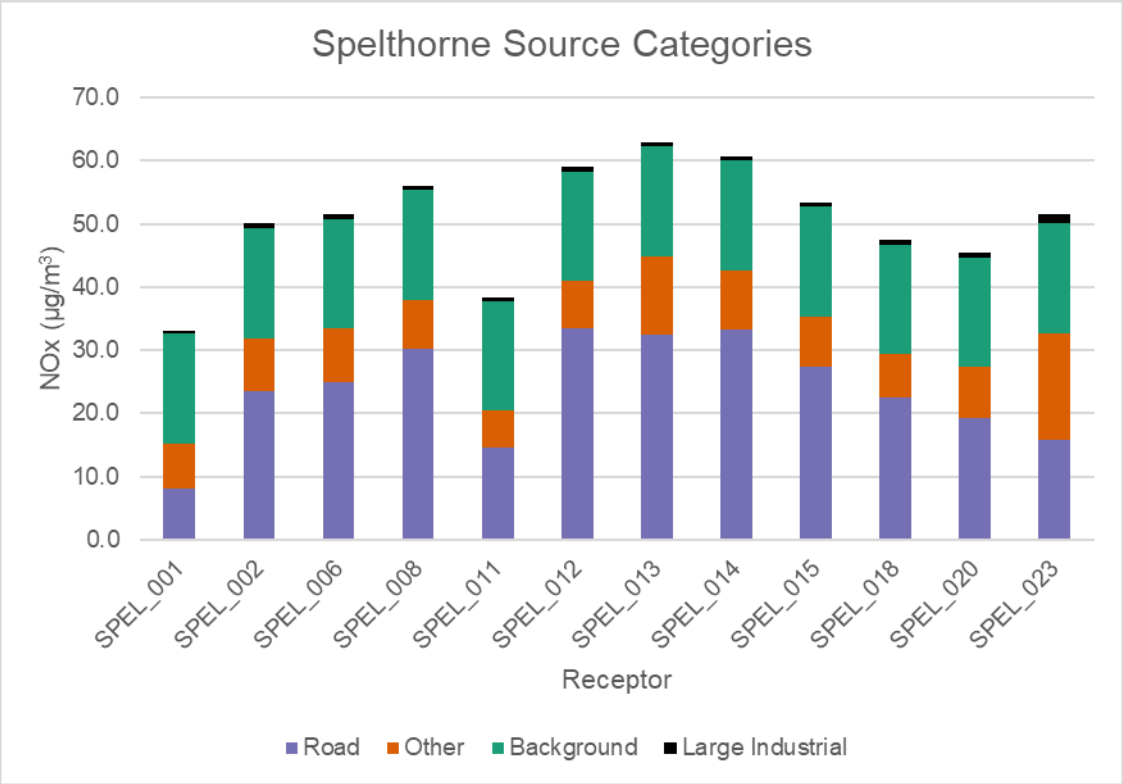


Figure 3 Total NO_X Modelled Source Apportionment (2017)

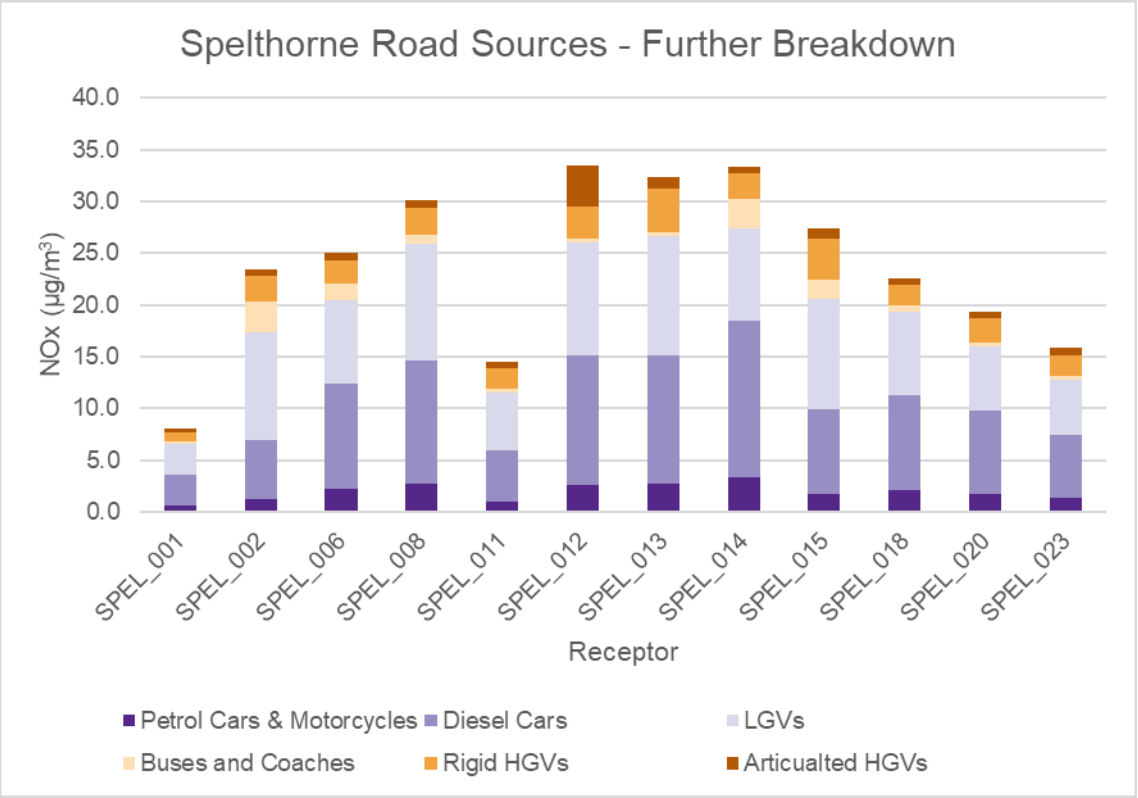


Figure 4 NO_X Road Traffic Breakdown (2017)

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 NO_X 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.

As noted in Table A.1, the EA was consulted in 2024 and confirmed that they are no aware of any waste facilities in the borough of Spelthorne that are causing or contributing to failures of air quality standards.

From the CERC modelling, 'Other' contributions to NO_X 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_x 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.

3.3.3 $PM_{2.5}$ 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

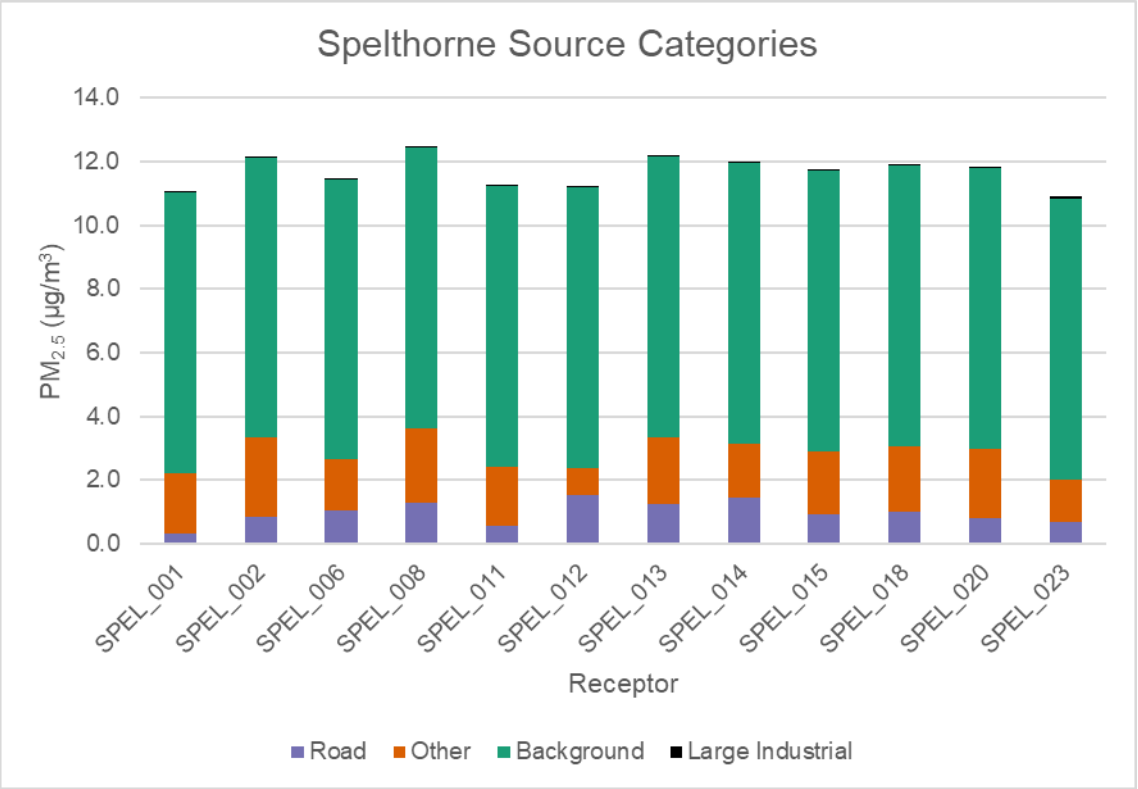


Figure 5 $PM_{2.5}$ Source Apportionment

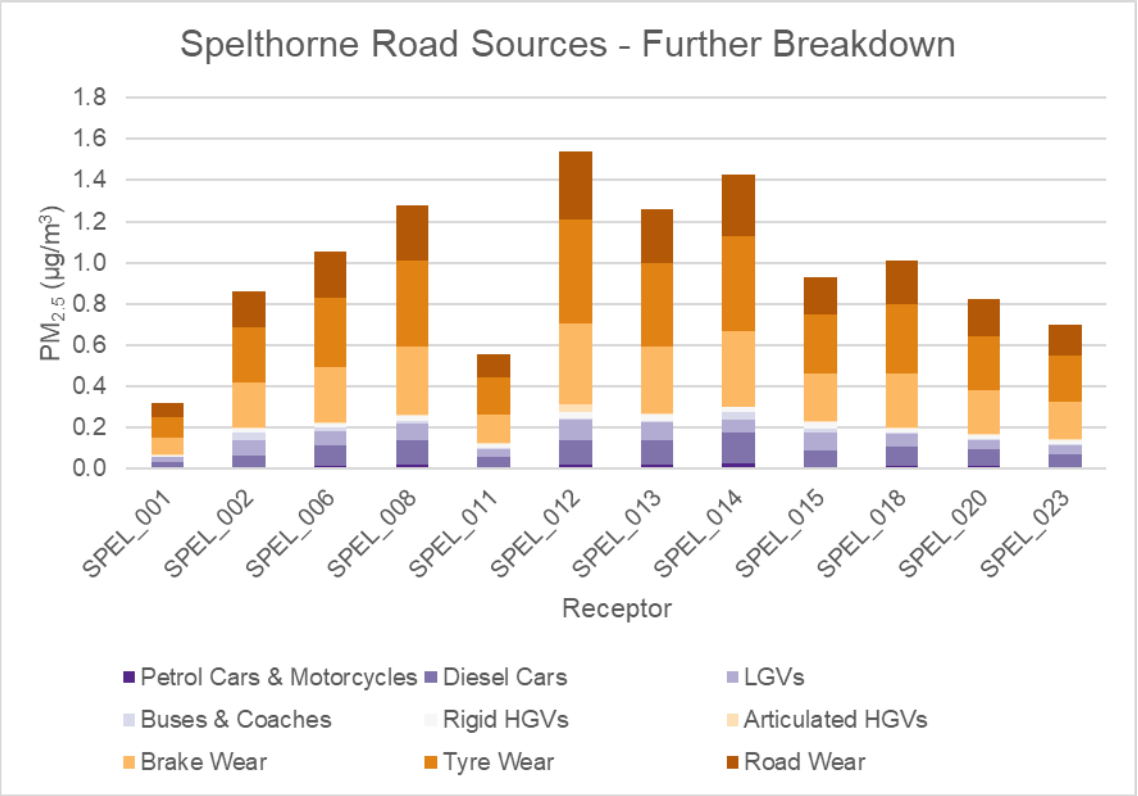


Figure 6 $PM_{2.5}$ Road Traffic Emissions Breakdown

Figure 5 shows that the largest source of $PM_{2.5}$ is 'Background', contributing on average 75% of $PM_{2.5}$ concentrations across Spelthorne and reflecting the transboundary nature of this pollutant. Road sources contribute on average less than 8% to $PM_{2.5}$ 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 $PM_{2.5}$ emissions from road sources. Large Industrial sources contribute less than 0.3% on average to $PM_{2.5}$ concentrations in Spelthorne.

3.3.4 Source Apportionment Heathrow

Figure 7 shows the proportion of background NO_x which has been estimated to derive from airports in 2024, taken from the Defra background maps. The map shows the contribution from airport emissions to background concentrations in percentage terms and demonstrates that emissions from Heathrow are relatively low (contributing under 20% of background NOx) for the vast majority of Spelthorne. In the grid squares adjacent to Heathrow, contributions are marginally higher, with concentrations of about a third.

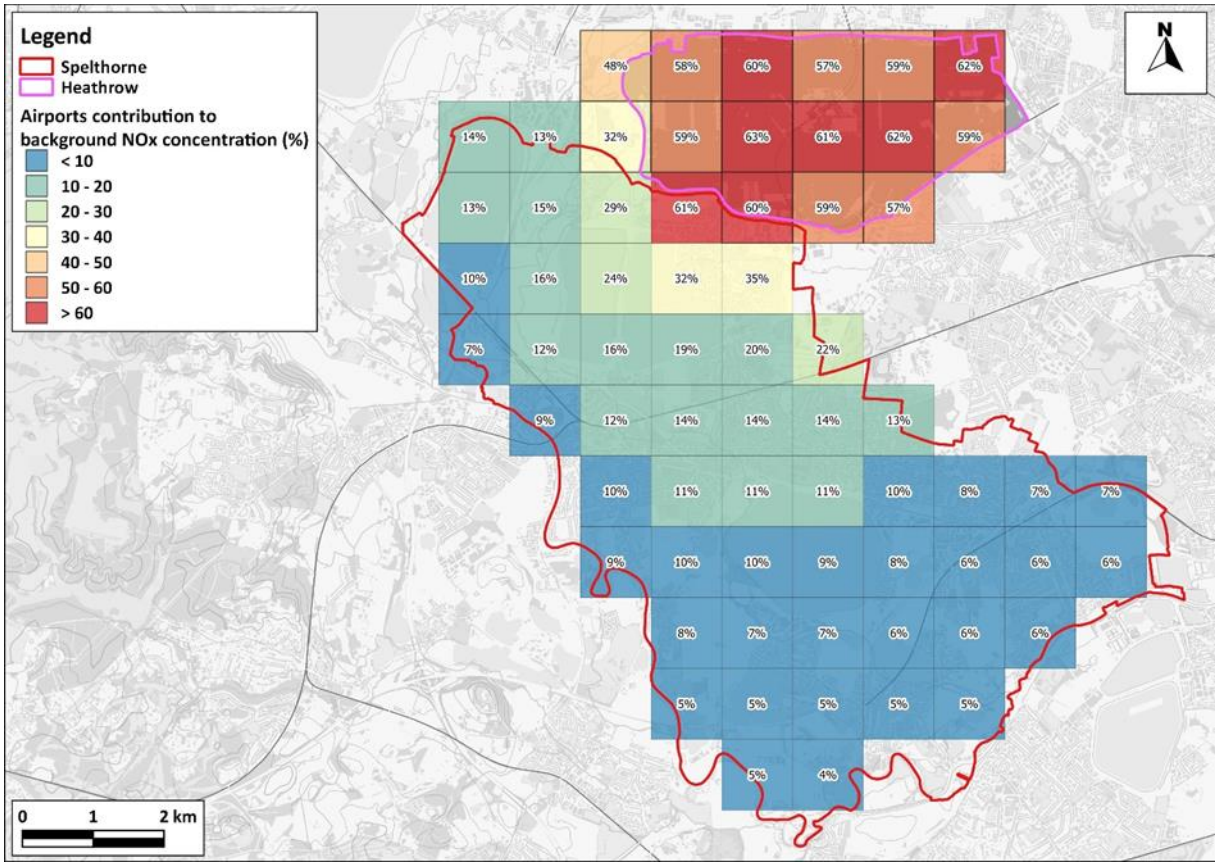


Figure 7 Airport contribution to Background NOx in Spelthorne

3.3.5 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.

Analysis of the Defra background maps for 2024 shows that airport contributions to NO_x concentrations are very localised and are not a large contributor to the background concentration in Spelthorne.

3.3.6 River Emissions

River emissions have been identified as a potential source of both NOx, PM_{10} and $PM_{2.5}$ 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 National air quality objectives are currently (refer to SBC webpage for the current ASR) 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_{10} and $PM_{2.5}$) may provide better health outcomes than focussing on hotspot locations. For this reason, wider, more strategic measures have been included and the Council 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_2 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 Population within the AQMA

Using address base data and an average number of people per household (2.34 for Spelthorne Borough), the population within the AQMA is estimated to be 86,470.

3.6 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_2, road transport is the largest source and therefore in order to reduce NO_2 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 $PM_{2.5}$ background (i.e. non-road) concentrations are the largest contributor to overall concentrations. This 'background' concentration includes large contributors to primary $PM_{2.5}$ concentrations, such as domestic solid fuel burning, which have not been explicitly modelled. $PM_{2.5}$ has a wide range of sources and in order to assist with reductions in $PM_{2.5}$, SBC will be introducing measures to reduce greenhouse gas emissions (which should also reduce $PM_{2.5}$ 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_{10} and $PM_{2.5}$. The Council are mindful that there is likely to be emerging guidance from Government on reducing $PM_{2.5}$ 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.

4.2 The response to the consultation stakeholder engagement will be given in Cost Effectiveness of AQAP Actions.

Defra does not expect authorities to undertake detailed cost-benefit analyses in their AQAPs. Most of the measures set out in Table 5.1 are difficult to quantify. This is because the traffic impact of measures is difficult to quantify in relation to changes in traffic numbers, or fleet composition, or in some cases the measure might be designed to reduce stop start traffic, or reduce idling, which cannot be easily quantified. Some measures do not have a direct influence on air quality emissions (such as those aimed at reducing exposure), and some are designed to encourage behaviour change to that of lower emissions, which again can be difficult to quantify. One of the measures (Measure 11 to 'Promote the use of "cleaner technology and fuels" within Spelthorne') has included a high-level quantified analysis of reduction in road – NOx emissions on a sample road within the AQMA with resulting assumptions about increases in electric cars. The DEFRA Emissions Factors Toolkit (EFT)v11.0 has been run using 2026 fleet, for the A30 within the AQMA (DfT Site Number 17749) and used to assess the reduction in road NOx assuming an additional 5% of electric cars (i.e. EFT default fleet assumes 7% Electric Cars which has been increased to 12% assuming reductions in conventional diesel and petrol cars (i.e.

half of the reductions from each). The same calculation has been undertaken assuming the 7% electric cars in the fleet increase to 17%. The 5% increase in electric cars would result in a 4.7% reduction in road NOx on this road, and the 10% increase in EVs would result in an 11.0% reduction in road NOx. A summary of the consideration of the impact of the measures, and whether they can be quantified is set out in Table 5.2 below, with the criteria used as follows:

Impact: ***Very Low*** – No indirect or direct impacts on air quality; ***Low*** – would reduce emissions, but not measurable by air quality monitoring and would be termed 'negligible' using industry standard guidance for modelling the impacts of developments; ***Medium*** - a change could be detected using an air quality model such as ADMS, but unlikely to be measurable by air quality monitoring, for example an improvement of up to 5% of the annual mean objective for NO_2 (2 µg/m^3); ***High*** – a change could potentially be monitored using standard monitoring techniques, i.e. an improvement of more than 5% of the annual mean objective for NO_2 (2 µg/m^3). It should be noted that the impact is largely based on NO_2.

Table 5.2 – Assumptions Related to Air Quality Impact in AQMAs

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
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 $PM_{2.5}$ through planning which are likely to be in place within the timeframe of this plan.	Unable to be quantified as impacts on traffic and other sources of pollutants such as domestic emissions unknown at this stage but has the potential to effect relatively large air quality improvements over longer timescales. For example, if significant modal shift to active travel, or an increase in renewable energy is achieved, this will have corresponding benefits in local air pollutant emissions. The amount of pollutant emissions that can be reduced will depend on the size and type of the development and how much of a focus is given to emissions reduction beyond present policy.	Medium to High
2	Establishment of a Climate Change Working Group.	The working group would ensure that a collaborative approach is undertaken, but the outcome of this approach cannot be quantified.	Low
3	Update the Surrey-wide Air Quality Modelling which was completed in 2019 to incorporate up to date input data.	No reduction in emissions due to modelling directly but provides updated source apportionment and concentration data as evidence base for air quality work.	None
4	Lobby for and support any future measures by Transport Authorities to encourage and facilitate the use of low emission buses in Spelthorne.	Cannot be quantified at this stage as baseline bus fleet is unknown and also unknown what proportion of the bus fleet is likely to go low emission.	Low
5	Develop a Green Infrastructure strategy to support the Local Plan.	Air Quality Expert Group (AQEG, 2008) Report on the effects of vegetation on urban pollution provides evidence from selected literature where the papers directly address the quantification of effects of vegetation on dispersion and deposition of pollutants and their effects on ambient concentrations. Overall vegetation and trees in particular are	Low

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
		regarded as beneficial for air quality, but they are not a solution to the air quality problems at a city scale. They are likely to be more beneficial for PM than for NOx.	
6	Promote access to grant funding for renewable energy installations for residents including Solar Together.	Difficult to quantify as unclear at this stage how many solar installations this may cover (and any reduction in domestic gas or solid fuel use as may replace non-renewable electric). Will reduce NOx emissions if reduction in gas boiler use.	Low
7	Incorporate energy efficiency measures and renewables into conversions, refurbishments, and maintenance of Council buildings and housing developments.	As above noted, difficult to quantify as unclear how many refurbishments of Council buildings etc. at this stage, we don't have data on potential gas reduction.	Low
8	Converting 50% of the Council fleet to electric or hydrogen by 2028 as stated in SBC's response to the Climate Emergency.	Data on vehicle number, vehicle types and annual mileage is not available and hence quantification cannot be undertaken. As fleet small and reductions in concentrations in AQMA will be minimal, but Council leading by example could encourage others to switch. There are currently no data available on the size of the Council fleet or on annual mileage which could be used to quantify the emissions reductions.	Low
9	To investigate the feasibility of producing annual emissions data for the Councils fleet vehicles in line with the Council's Climate Change Strategy.	Feasibility stage only – not likely to reduce emissions directly as just provides information on fleet emissions for future policy, but useful for encouraging future reductions.	None
10	Investigate the feasibility of introducing emissions-based parking tariffs.	Feasibility stage only, no data on how much this action would result in residents purchasing electric vehicles – likely to be complementary to other actions around encouraging EVs. Therefore, cannot quantify.	Low
11	Promote the use of "cleaner technology and fuels" within Spelthorne.	There is currently no data on what shift this might entail as will be dependant on level of interventions. However, the EFT has been run using 2026 fleet, for the A30 within the AQMA (DfT Site Number 17749) and used to assess the reduction in road NOx	Medium

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
		assuming an additional 5% of electric cars (i.e. EFT default fleet assumes 7% Electric Cars which has been increased to 12% assuming reductions in conventional diesel and petrol cars (i.e. half of the reductions from each). The same calculation has been undertaken assuming the 7% electric cars in the fleet increase to 17%. The 5% increase will result in a 4.7% reduction in road NOx on this road, and the 10% increase in EVs would result in an 11.0% reduction in road NOx.	
12	Deliver EV taxi programme to encourage taxi companies and drivers to invest in electric fleets.	Taxis are relatively small proportion of the fleet, and the same principles as calculated for Action 11 apply, but absolute reductions will be smaller. Cannot be quantified in detail as unclear as to the proportion of taxis on the road, how many taxis would become electric and how much mileage they would undertake per year.	Low
13	Supporting air quality research and providing public information regarding air quality, including an air alert for vulnerable members of the population.	Providing information on air quality to the public would be with the aim to change behaviour, but difficult to quantify what that change might be (and hence resulting changes in emissions). Air alert designed to change exposure, rather than emissions.	Low
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.	SBC has very little influence over Heathrow operations, but will lobby	Low (will depend on what decisions are taken nationally)
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.	Raising awareness of the health implications of poor air quality would be with the aim to change behaviour, but difficult to quantify what that change might be (and hence resulting changes in emissions).	Low

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
16	Implement further Local Street Improvements (LSIs), or similar schemes.	Much of the work on the evaluation of 'Mini–Holland' Schemes (designed with significant investment to increase cycling and walking rates in 3 outer London Boroughs), including Low Traffic Neighbourhoods specifically, has been undertaken by Rachael Aldred and colleagues at University of Westminster. Research, based on three years of study following the implementation of Transport for London's (TfL) Mini-Holland Programme, indicates that implementing LTNs within these schemes was more likely to result in reduced levels of car ownership, and a reduction in the average minutes of car use in any given week, by residents. Although they may have been implemented in a different context, this provides quantified evidence of the impacts of LTNs, LSIs etc.	Low to Medium
17	Junction improvements to increase capacity and improve road layouts linked to new developments.	Ultimately this is aiming to reduce congestion, and hence emissions, but will, to some extent, be offset by increases in vehicles. No specific schemes have traffic data available for quantification of air quality impacts.	Unknown
18	Promoting Alternative Travel – Delivery of bus priority measures, cycle parking and interchange opportunities.	Further encouragement of modal shift to active travel and public transport. Unclear what behaviour change this could result in, and likely to work in conjunction with other measures within the plan to reduce private vehicle use. See assumptions for actions 24-26.	Low (but potentially medium in conjunction with other measures)
19	The Council will work with Knowle Green Estate and suppliers to promote retrofit, insulation, energy efficiency and adaptation measures.	Difficult to quantify as unclear what impact these measures will have on gas use within properties on Knowle Green Estate – at this stage, data not available on magnitude of gas reductions.	Low
20	To investigate the feasibility of introducing Air Quality Supplementary Planning Guidance.	Feasibility process only. Emissions reductions from Supplementary Planning Document cannot be quantified as difficult to judge the impacts on developments overall. Potentially medium in longer term if successful	Low to Medium

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
21	Increase Spelthorne Smoke Control Area to cover the whole borough.	Will not have any impact on NOx but could potentially reduce $PM_{2.5}$ if accompanied by information campaign and resulting behaviour change (reduction in wood burning/ switch to seasoned wood)	Low to medium ($PM_{2.5}$)
22	To continue to fund a comprehensive air quality monitoring network including automatic monitoring of PM_{10} and $PM_{2.5}$.	Does not directly reduce emissions but adds to evidence base for air quality work.	None
23	Refresh bonfires and anti-idling campaign.	Likely to be relatively small sources overall, but potentially significant locally. Difficult to quantify as very localised impacts only.	Low
24	Continue to implement Cycling for Health.	Measures to increase cycling and walking could potentially be quantified together, although the impacts on behaviour are difficult to quantify. The Mini-Holland programme is part of the Mayor's Healthy Streets approach. Substantial investment (around £100 million) is helping three Outer London boroughs, transform into cycling hubs, equipped with high specification Dutch-style infrastructure. Changes include redesigned junctions that are safer for cyclists and pedestrians, segregated cycle lanes on busy roads and reductions in the amount of traffic using residential streets. Longer term studies have examined travel behaviour change over three years of major investments in active travel infrastructure. Aldred *et al (2021)* found that for respondents living close to the Mini-Holland interventions, there was a consistent increase in duration of active travel compared with a control group. Changes in active travel behaviour were stronger in the high dose area (defined based on officer information on where main interventions were implemented) than in the low dose areas. Most of the increase was in walking, with a lesser increase in cycling. Published data do not indicate whether this switch is likely to be from private vehicles, or from public transport, and the detailed air quality impacts of these changes have not been assessed.	Low (but potentially medium in conjunction with other measures)
25	Bikeability School Cycling Proficiency training and Feet First Walking Training.		
26	Continue to implement Walking for Health.		
27	Continue to implement School and Business Travel Plans.	A study published by Cairns and Newson demonstrated that school travel plans can be extremely effective in delivering a number of socially desirable goals, including traffic and congestion reduction, and a range of health gains. Moreover, it seems possible to	Low

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
		achieve significant changes in travel behaviour at all types of school, and in all types of location, although different strategies are likely to be needed for different circumstances. As schools traffic is only a proportion of traffic, judged to be small impact in AQMA overall.	
28	Support work on the Health and Wellbeing Strategy.	Again, difficult to quantify this action specifically, but will add to overall public awareness and resulting behaviour change.	Low
29	Continue to promote sustainable transport/ homeworking with staff to reduce travel and explore schemes offering Council employees alternatives to private vehicle use.	This would be quantified if data were available on council employee travel and changes through these promotions, but at this stage, this data is not held by SBC.	Small
30	Continue collaboration with Heathrow Airport Ltd to reduce emissions arising from the operation of Heathrow Airport.	SBC has very little influence over Heathrow operations, and difficult to quantify the effects of collaborative working	Small
31	Support Traffic Management interventions to reduce road traffic emissions either through smoothing traffic flow or reducing vehicle use.	No specific schemes which could be quantified. Would need to have traffic data from SCC which is resource intensive for SCC, then resource intensive to undertake the AQ modelling.	Small (and localised)
32	Support and help implement the Spelthorne Local Cycling and Walking Infrastructure Plan	See assumptions for measures 24, 25 and 26	Low (but potentially medium in conjunction with other measures)

In order to provide an indication of cost effectiveness, Table 5.3 has been determined using best professional judgement to clearly set out impact from table 5.2 above (i.e., effectiveness) and cost in a qualitative way. Although the impacts for many of the actions is judged to be low individually, as a package, and over a number of years, the impacts of the measures will cumulatively be much larger.

The analysis also accounts for the feasibility of implementing the measures, with those likely to progress given a higher priority than those which are acknowledged to be a challenge to implement. The feasibility score factors in influences such as accessibility to funding, resources being available and political backing.

These three criteria are then combined to provide a priority 'score' by scoring high, medium and low for each parameter on a 1 to 3 basis and multiplying the scores.

Criteria to allow for the analysis of cost and feasibility are included below.

Cost: *Low* - < £50K; *Medium* - £50K-£500K; *High* - >£500K

Feasibility: *High* – measure has already been started, good political will and likely to be sufficient resources. *Medium* – possible to implement, but may require some further feasibility work, and/ or additional support and resources. *Low* – difficult to implement, lack of political will to implement, time and resource intensive.

Table 5.3 – Cost Effectiveness of AQAP Actions

Action No.	Action	Impact on Air Quality	Cost	Feasibility
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 $PM_{2.5}$ through planning which are likely to be in place within the timeframe of this plan.	Medium to High	Medium	High
2	Establishment of a Climate Change Working Group.	Low	n/a	High
3	Update the Surrey-wide Air Quality Modelling which was completed in 2019 to incorporate up to date input data.	None	Low	Medium
4	Lobby for and support any future measures by Transport Authorities to encourage and facilitate the use of low emission buses in Spelthorne.	Low	Unclear	Medium
5	Develop a Green Infrastructure strategy to support the Local Plan.	Low	Low	Medium
6	Promote access to grant funding for renewable energy installations for residents including Solar Together.	Low	Low	Medium
7	Incorporate energy efficiency measures and renewables into conversions, refurbishments, and maintenance of Council buildings and housing developments.	Low	High	Medium

Action No.	Action	Impact on Air Quality	Cost	Feasibility
8	Converting 50% of the Council fleet to electric or hydrogen by 2028 as stated in SBC's response to the Climate Emergency.	Low	High	Medium
9	To investigate the feasibility of producing annual emissions data for the Councils fleet vehicles in line with the Council's Climate Change Strategy.	None	Low (per annum)	Medium
10	Investigate the feasibility of introducing emissions-based parking tariffs.	Low	Low	Medium
11	Promote the use of "cleaner technology and fuels" within Spelthorne.	Medium	Unclear	High
12	Deliver EV taxi programme to encourage taxi companies and drivers to invest in electric fleets.	Low	Medium	Medium
13	Supporting air quality research and providing public information regarding air quality, including an air alert for vulnerable members of the population.	Low	Low	High
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.	Low (will depend on what decisions are taken nationally)	Low	High

Action No.	Action	Impact on Air Quality	Cost	Feasibility
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.	Low	Low	High
16	Implement further Local Street Improvements (LSIs), or similar schemes.	Low to Medium	Unclear	Low
17	Junction improvements to increase capacity and improve road layouts linked to new developments.	Unknown	High	Medium
18	Promoting Alternative Travel – Delivery of bus priority measures, cycle parking and interchange opportunities.	Low (but potentially medium in conjunction with other measures)	High	Medium
19	The Council will work with Knowle Green Estate and suppliers to promote retrofit, insulation, energy efficiency and adaptation measures.	Low	Not costed at present	Medium
20	To investigate the feasibility of introducing Air Quality Supplementary Planning Guidance.	Low to Medium	Low	Medium
21	Increase Spelthorne Smoke Control Area to cover the whole borough.	Low to medium ($PM_{2.5}$)	Low	High

Action No.	Action	Impact on Air Quality	Cost	Feasibility
22	To continue to fund a comprehensive air quality monitoring network including automatic monitoring of PM_{10} and $PM_{2.5}$.	None	Low	High
23	Refresh bonfires and anti-idling campaign.	Low	Low	High
24	Continue to implement Cycling for Health.	Low (but potentially medium in conjunction with other measures)	Low	High
25	Bikeability School Cycling Proficiency training and Feet First Walking Training.		Unknown	High
26	Continue to implement Walking for Health.		Unknown	High
27	Continue to implement School and Business Travel Plans.	Low	Low	High
28	Support work on the Health and Wellbeing Strategy.	Low	Medium	High
29	Continue to promote sustainable transport/ homeworking with staff to reduce travel and explore schemes offering Council employees alternatives to private vehicle use.	Small	Low	High
30	Continue collaboration with Heathrow Airport Ltd to reduce emissions arising from the operation of Heathrow Airport.	Small	Low	High
31	Support Traffic Management interventions to reduce road traffic emissions either through smoothing traffic flow or reducing vehicle use.	Small (and localised)	Depends on scheme	Medium

Action No.	Action	Impact on Air Quality	Cost	Feasibility
32	Support and help implement the Spelthorne Local Cycling and Walking Infrastructure Plan	Low (but potentially medium in conjunction with other measures)	High	Medium

Appendix A: Response to Consultation in future versions of this report.

Table 4.1 – Consultation Undertaken

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, the 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
Bodies representing local business interests and other organisations as appropriate	Yes, this was undertaken through online consultation and direct emails.

4.3 Steering Group

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

A Steering Group meeting was held on 6th 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 88 sets out the spheres of influence and control, which have been taken on board for measures within the AQAP.

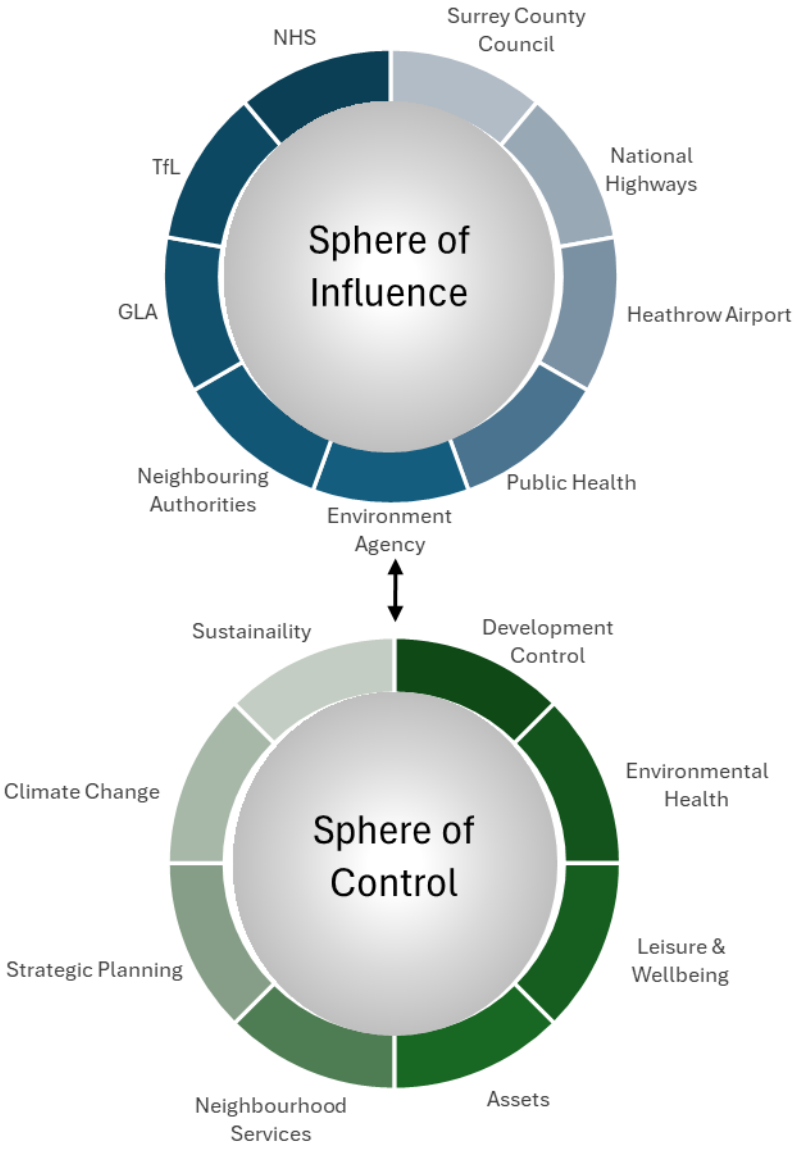


Figure 8 Spheres of Influence and Control

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.

Error! Reference source not found. 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

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
1	Continue 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 $PM_{2.5}$ through planning which are likely to be in place within the timeframe of this plan.	Policy Guidance and Development 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	Implementation	Reduced vehicle emissions, heat and energy plant emissions and construction dust emissions.	Measured concentration of NO_2 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[11].	2023 Emerging Local Plan examination hearings are currently paused[12]. 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 Development Control	Air Quality Planning and Policy Guidance	2021	2032	SBC	SBC	NO	Funded - within staffing budgets	n/a	Implementation	Ultimate target is reductions in greenhouse gas emissions which have associated air pollutant emissions reductions	To promote sustainable transport amongst the staff. Support residents and businesses to adopt clean vehicles and car-sharing. Promoting	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. Introducing a Climate Change focussed Supplementary Planning Document[14]. Rolling out Carbon Literacy training for Councillors and	The River Thames Scheme Development Consent Order is a project to create additional flood capacity along the River Thames in Spelthorne and neighbouring boroughs which is required due to climate change. The Environmental Health team are a regulatory consultee to this DCO and the DCO

11 Surrey County 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-and- guidance/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.

12 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.

14 SBC has sought advice from experts within the Association for Public Service Excellence in setting policy.

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													sustainable travel[13].	Staff[15] 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.	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 incorporate up to date input data.	Policy Guidance and Development Control	Other policy	2026	2027	SCC, Surrey Public Health and SBC (via Surrey Air Alliance)	SCC, Surrey Public Health and SBC (via Surrey Air Alliance)	Possibly	Not Funded	£10-£50k (for Spelthorne)	Planning	N/A	Receipt of updated Surrey-wide air quality modelling of NOx, PM_{10} and $PM_{2.5}$	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 wider modelling exercise. At Spelthorne funding needs to clear Committee which is a long process compared with other Surrey Boroughs and can present

[13] including actively supporting improvements to public transport access to Heathrow and sustainable travel to school.

[15]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.

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															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 Procurement - 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[16] 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 Development Control	Other policy	2025	2026	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.	
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 combustion sources / replacemen	Ongoing	Ongoing	SCC	Solar Together	NO	Funded	£10-£50k (for Spelthorne) for implementation of any future scheme	Implementation	Households with solar energy are likely to utilise generated electricity for heating the home, which can reduce boiler and	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[17]. Phase 2 of Solar Together Surrey launched in 2023 and is managed by SCC in	This relies on homeowners to sign up for the scheme.

[16] who currently operate the number 8 route through Staines to Slough

[17] 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 insurance-backed guarantees.

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			t of combustion sources									domestic solid fuel burning emissions. Very difficult to quantify		partnership with independent experts, iChoosr, who will administer and deliver the scheme. The scheme is currently closed to new applications at the present time[18].	
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 Procurement	Ongoing	ongoing	SBC (Assets/Facilities /CCT)	Public Sector Low Carbon Skills Fund	NO	Partially Funded	>£10 million	Implementation	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[19]. SBC has been awarded £994,883 by the Government and Sport England 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 centre will be reduced to zero as a result of the work.	Budget
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 Procurement - Prioritising uptake of low emission vehicles	Ongoing	2029	SBC(Neighbours 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 infrastructure in the depot to increase the power supply	Implementation	Difficult to quantify in terms of overall local air pollutant emissions	50% of the Council fleet to electric or hydrogen by 2028	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.

[18] 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.

[19] Have completed 98% of EPC surveys for all council sites against requirements of the Minimum Energy Efficiency Standards.

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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	Continue to promote the use of "cleaner technology and fuels" within Spelthorne.	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure 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 funding for charge points	NO	Partially Funded	-	Implementation	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 developments in Spelthorne. Number of charge points delivered.	Location suggestions for EV chargers were submitted to a consultation run by SCC 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 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.	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^2 exceedance occurred to facilitate off - road charging. Increasing on road charging facilities in that area requires resource from SCC.

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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 the Surrey Air Alliance. Match funding from SCC and a small contribution from Environmental Health budget at some of the participating Local Authorities	YES	Partially Funded	£100k - £500k	Planning	A reduction in NOx and particulate pollution from taxi and private hire vehicles.	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 Style cabs or those with Euro 6 standard engines to operate in Spelthorne to improve accessibility of the taxi fleet for disabled customers.	Lack of legal resource in local authorities to support the procurement process has led to repeated delays[20].
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	~~2023~~ 2029	Spelthorne Borough Council, Surrey Air Alliance and CISHA Air Quality Working Group	Project dependant	NO	Not Funded	-	Implementation	Input to air quality related research	Data available to the Council and other parties in projects	Initial project completed August 2022[21] 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	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

[20] 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.

[21] 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_2, CO_2 and methane around the borough.

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														Management and air quality monitoring[22]. Through membership of CISHA Air Quality Working Group SBC are helping to facilitate research into local air quality and air quality in relation to aviation and related sources of emissions[23]. 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 air quality alert service that residents can sign up to aimed at residents with health conditions that are affected by episodes of poor air quality.	funding of the service by multiple Surrey districts and boroughs, and the provision on offer by service providers. It is expected that a new 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	Public Information	Other	Ongoing	Ongoing	Spelthorne Borough Council MAT/ SCC	Within staffing budgets (staff time only)	NO	Funded (staff time only)	<£10K	Implementation	Will depend on specific proposals, but potential for sizeable emission reductions in the long term	n/a	SBC is active on Heathrow Strategic Planning Group (HSPG) Environment Group	Competing resource priorities

[22] 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.

[23] 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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	third runway and changes to the regulation and operation of UK airspace.														
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 mechanisms	2022	2025	Surrey and Heartlands Health and Care partnership, SCC and SBC (via the Surrey Air Alliance)	NHS and Spelthorne Borough Council	NO	Funded	-	Implementation	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 online 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[24]. 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 for funding to carry out activities	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 Heartlands Health and Care Partnership via the Surrey Air Alliance

[24] 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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														to promote Clean Air Night more widely[25].	
16	Implement further Local Street Improvements (LSIs), or similar schemes.	Traffic Management	Strategic highway improvements, Re-prioritising Road space away from cars, including Access management, 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	Previously called Liveable Neighbourhoods. There are 27 Liveable Neighbourhood Zones/ Local Street Improvements across SBC[26].	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 layouts linked to new developments.	Transport Planning and Infrastructure	Other	2020	2025	SCC, planning applicants and developers	Developers via the Planning regime	NO	Funded	£500k - £1 million	Implementation	Very difficult to quantify as dependent on specific scheme - will reduce emissions where a modal shift to active travel is successful.	Reduced congestion on Borough roads reduced journey times, reduced emissions	Shepperton Studios: two junctions have been completed, with another junction improvement in progress (due for completion August 2024). Another 4 junction improvements are planned with all due to be completed by September 2026.	There are a number of concurrent roadworks taking place in SBC which collectively cause temporary traffic congestion, longer journey times, and interrupt public transport such as bus routes.

[25] 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.

[26] 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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18	Promoting Alternative Travel – Delivery of bus priority measures, cycle parking and interchange opportunities.	Transport Planning and Infrastructure	Public transport improvements-interchanges 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[27] The SCC webpage 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 notably some services between Ashford Hospital and Staines-upon-Thames. SBC Local Cycling and Walking Infrastructure Plan	Public transport by rail and bus remains costly in SBC when compared with neighbouring London Boroughs[29]. Connectivity by public transport to common places of work across Surrey is poor[30]. 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 Spelthorne has not yet been successful[31]. 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

[27] Including: Winkworth Arboretum, Claremont Landscape Gardens, RHS Gardens Wisley, National Trust Hatchlands Park and Waverley Abbey.

[29] 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.

[30] 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

[31] 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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														(LCWIP) has been produced[28].	reduce carbon emissions in line with the climate emergency[32].
19	The Council will work with Knowle Green Estate and other suppliers to promote retrofit, insulation, energy efficiency and adaptation measures.	Promoting Low Emission Plant	Shift to installations using low emission fuels for stationary and mobile sources		2027	Housing/CCO/ Knowle Green Estates	Social Housing Decarbonisation Fund	No	Not Funded	Not costed at present	Planning	Unquantifiable, energy efficiency measures can reduce emissions from boiler use and the use of Combined Heat and Power Plant which creates emissions to air.	Installation of energy efficiency measures on social housing	Potential for working with Surrey CC on joint bid in the future. Knowle Green Estate [33]is a housing company owed by SBC. The council does not however own any housing directly. Housing is provided via social housing providers e.g. A2 Dominion (A2D), a housing association[34] A meeting with A2 D (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.
20	To investigate the feasibility of introducing Air Quality Supplementary Planning Guidance.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2025 (for feasibility)	2026	Spelthorne Borough Council	Unclear - potentially planning budgets if professional services are required to deliver the measure.	No	Not Funded	£10-50K (including internal staff time)	Planning	Unquantifiable, but any emissions reduction will be long term	Increased consistency in air quality assessments	No progress	Resourcing. Co-ordination in with Local Plan update/ process.
21	Increase Spelthorne Smoke Control Area to	Policy Guidance and	Other policy	2025	2026	Spelthorne Borough Council	Unclear - within staffing budgets	Potential for grant	Not Funded	<£10K	Planning	Unquantifiable, likely to have more effect in	Order approved for whole borough SCA	Officers will attend a Defra workshop giving updated advice on implementing new Smoke Control Areas. This	Requires Committee approval and a public consultation exercise.

[28] 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.

[32] 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.

[33] https://knowlegreenestates.co.uk/

[34] https://a2dominion.co.uk/

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	cover the whole borough.	Development Control						funding				raising awareness of effects of solid fuel burning		was scheduled for March 2024 but has been cancelled, Officers will attend when the workshop is rescheduled.	
22	To continue to fund a comprehensive air quality monitoring network including automatic monitoring of PM_{10} and $PM_{2.5}$.	Public Information	Other	Ongoing	2029 (ie to the end of the plan and beyond)	SBC	Council budgets[35], Have used Defra grant funding for sensors	Yes (historically)	Funded on annual basis	£10-50K	Implementation	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 and equipment 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. Councils cannot ban bonfires, but can enforce when statutory nuisance is demonstrated. Increased public awareness that bonfires and idling cause nuisance and unnecessary emissions may help to reduce the incidence.	
24	Continue to implement Cycling for Health.	Promoting Travel Alternatives	Promotion of cycling	2016	2032	SBC and SCC	SBC	NO	Funded	<£10K	Implementation	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	Scheme in operation with regular guided cycle rides and route suggestions for independent rides[36]. 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	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

[35] Heathrow independently fund the automatic site at Oaks Road, Stanwell.

[36] There are around 41km of cycle facility in Spelthorne – cycle paths, cycle lanes and advisory routes.

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														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.	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 training and Feet First Walking Training.	Promoting Travel Alternatives	Promotion of cycling	2012	2032	SCC	SCC	NO	Funded	-	Implementation	Very difficult to quantify but will reduce emissions where a modal shift to active travel is successful.	Increased uptake in cycle and walking journeys made to schools	SCC offers subsidised Bikeability cycle training to all year 2, year 5 and year 6 pupils in the Borough and also offers customised cycle training for all ages[37]. Walking Instructors have taught nearly 5,100 primary school pupils in nearly 90 schools across the county in the 2022/23 academic year[38].	Charged for service paid for by school or parents/carers[39].
26	Continue to implement Walking for Health.	Promoting Travel Alternatives	Promotion of walking	2016	2032	SBC and SCC	Spelthorne Borough Council	NO	Funded	-	Implementation	Very difficult to quantify but will reduce emissions where a modal shift to	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[40]. SBC has substantial length of Thames Path which passes through scenic areas and is suitable for walking and	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

[37] 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.

[38] Next academic year, 40 schools have booked Feet First: Walking Training across Surrey.

[39] Details of how schools can request training can be found here

[40] 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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												active travel is successful.		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 Colne Valley Regional Park.	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 Business Travel Plans.	Promoting Travel Alternatives	School Travel Plans	2012	2032	SCC	SCC Greener Futures and the Surrey Air Alliance	NO	Funded	-	Implementation	Reduce NOx and $PM_{2.5}$ 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.	100% of schools to implement travel plans	SCC are supporting schools to reduce their emissions through 3 schemes. The Eco Schools Green Flag scheme[41], the Mode Shift Stars Travel Plan scheme[42] and Lets Go Zero[43]. 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[44]. 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	Most schools opt to use the funding via the Memorandum of 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.

[41] Across Surrey there are 88 Green Flag Eco-Schools with 232 schools involved with the program.

[42] 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.

[43] Currently 3 schools in Spelthorne are signed up to the Let's Go Zero Surrey scheme.

[44] 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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														infrastructure outside 50 schools over the next 3 years.	
28	Continue to support work on the Health and Wellbeing Strategy.	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	2020	2032	SCC and SBC	SCC and SBC	NO	Funded	£100k - £500k	Implementation	Reduce NOx and $PM_{2.5}$ 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[45] 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 [46]	
29	Continue to promote sustainable transport/ homeworking with staff to reduce travel and explore schemes offering Council employees alternatives to	Promoting Travel Alternatives	Encourage / Facilitate home-working	Ongoing	Ongoing	SBC (Neighbours Services/ CCT)	Within Council budgets	NO	Not funded	£10K-£50K	Implemented		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	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.

[45] . 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.

[46] 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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	private vehicle use.													promoted to staff 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.app/	
30	Continue collaboration with Heathrow Airport Ltd to reduce emissions arising from the operation of Heathrow Airport.	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes 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	Implementation	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	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 for airside ULEZ in 2025.	Heathrow Airport Ltd does not own all the vehicles and buildings that operate at the airport, and as such it does 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 therefore it seeks to influence improvements.

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Year	Organisations Involved	Funding Source	Defra AQ Grant Funding	Funding Status	Estimated Cost of Measure	Measure Status	Target Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Potential Barriers to Implementation
														Continuing to monitor air quality.	
31	Support Traffic Management interventions to reduce road traffic emissions either through smoothing traffic flow or reducing vehicle use.	Traffic Management	Strategic highway improvements	2024	2029	SCC, National Highways,	Various	No	Many schemes dependent on outcomes of other processes	various	Implementation	Dependent on intervention	Delivery of Interventions	Improvements to signalling at Sunbury Cross Roundabout Capacity and cycle safety improvement not yet funded.	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.
32	Support and help implement the Spelthorne Local Cycling and Walking Infrastructure Plan	Promoting Travel Alternatives	Promotion of cycling	Ongoing	Ongoing	SCC, SBC	Unclear at this stage, but LCWIP used to bid for funding	No	Partially funded	Costs vary from £2.5 to 11.9 million for the cycle routes and from £3.1 to 4.6 million for the CWZ/ walking routes.	Implementation	Very difficult to quantify but will reduce emissions where a modal shift to active travel is successful	Delivery of schemes within the LCWIP	There are a number of potential sources of funding available to deliver improvements identified in a LCWIP including Integrated Transport and Maintenance Block Funding, government grants, developer funding as well as surplus parking income and Local Economic Partnership (LEP) and / or internal funding.	

5.1 Cost Effectiveness of AQAP Actions.

Defra does not expect authorities to undertake detailed cost-benefit analyses in their AQAPs. Most of the measures set out in Table 5.1 are difficult to quantify. This is because the traffic impact of measures is difficult to quantify in relation to changes in traffic numbers, or fleet composition, or in some cases the measure might be designed to reduce stop start traffic, or reduce idling, which cannot be easily quantified. Some measures do not have a direct influence on air quality emissions (such as those aimed at reducing exposure), and some are designed to encourage behaviour change to that of lower emissions, which again can be difficult to quantify. One of the measures (Measure 11 to 'Promote the use of "cleaner technology and fuels" within Spelthorne') has included a high-level quantified analysis of reduction in road – NOx emissions on a sample road within the AQMA with resulting assumptions about increases in electric cars. The DEFRA Emissions Factors Toolkit (EFT)v11.0 has been run using 2026 fleet, for the A30 within the AQMA (DfT Site Number 17749) and used to assess the reduction in road NOx assuming an additional 5% of electric cars (i.e. EFT default fleet assumes 7% Electric Cars which has been increased to 12% assuming reductions in conventional diesel and petrol cars (i.e. half of the reductions from each). The same calculation has been undertaken assuming the 7% electric cars in the fleet increase to 17%. The 5% increase in electric cars would result in a 4.7% reduction in road NOx on this road, and the 10% increase in EVs would result in an 11.0% reduction in road NOx. A summary of the consideration of the impact of the measures, and whether they can be quantified is set out in Table 5.2 below, with the criteria used as follows:

Impact: ***Very Low*** – No indirect or direct impacts on air quality; ***Low*** – would reduce emissions, but not measurable by air quality monitoring and would be termed 'negligible' using industry standard guidance for modelling the impacts of developments; ***Medium*** - a change could be detected using an air quality model such as ADMS, but unlikely to be measurable by air quality monitoring, for example an improvement of up to 5% of the annual mean objective for NO_2 (2 µg/m^3); ***High*** – a change could potentially be monitored using standard monitoring techniques, i.e.

an improvement of more than 5% of the annual mean objective for NO_2 (2 µg/m^3). It should be noted that the impact is largely based on NO_2.

Table 5.2 – Assumptions Related to Air Quality Impact in AQMAs

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
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 $PM_{2.5}$ through planning which are likely to be in place within the timeframe of this plan.	Unable to be quantified as impacts on traffic and other sources of pollutants such as domestic emissions unknown at this stage but has the potential to effect relatively large air quality improvements over longer timescales. For example, if significant modal shift to active travel, or an increase in renewable energy is achieved, this will have corresponding benefits in local air pollutant emissions. The amount of pollutant emissions that can be reduced will depend on the size and type of the development and how much of a focus is given to emissions reduction beyond present policy.	Medium to High
2	Establishment of a Climate Change Working Group.	The working group would ensure that a collaborative approach is undertaken, but the outcome of this approach cannot be quantified.	Low
3	Update the Surrey-wide Air Quality Modelling which was completed in 2019 to incorporate up to date input data.	No reduction in emissions due to modelling directly but provides updated source apportionment and concentration data as evidence base for air quality work.	None
4	Lobby for and support any future measures by Transport Authorities to encourage and facilitate the use of low emission buses in Spelthorne.	Cannot be quantified at this stage as baseline bus fleet is unknown and also unknown what proportion of the bus fleet is likely to go low emission.	Low
5	Develop a Green Infrastructure strategy to support the Local Plan.	Air Quality Expert Group (AQEG, 2008) Report on the effects of vegetation on urban pollution provides evidence from selected literature where the papers directly address the quantification of effects of vegetation on dispersion and deposition of pollutants and their effects on ambient concentrations. Overall vegetation and trees in particular are	Low

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
		regarded as beneficial for air quality, but they are not a solution to the air quality problems at a city scale. They are likely to be more beneficial for PM than for NOx.	
6	Promote access to grant funding for renewable energy installations for residents including Solar Together.	Difficult to quantify as unclear at this stage how many solar installations this may cover (and any reduction in domestic gas or solid fuel use as may replace non-renewable electric). Will reduce NOx emissions if reduction in gas boiler use.	Low
7	Incorporate energy efficiency measures and renewables into conversions, refurbishments, and maintenance of Council buildings and housing developments.	As above noted, difficult to quantify as unclear how many refurbishments of Council buildings etc. at this stage, we don't have data on potential gas reduction.	Low
8	Converting 50% of the Council fleet to electric or hydrogen by 2028 as stated in SBC's response to the Climate Emergency.	Data on vehicle number, vehicle types and annual mileage is not available and hence quantification cannot be undertaken. As fleet small and reductions in concentrations in AQMA will be minimal, but Council leading by example could encourage others to switch. There are currently no data available on the size of the Council fleet or on annual mileage which could be used to quantify the emissions reductions.	Low
9	To investigate the feasibility of producing annual emissions data for the Councils fleet vehicles in line with the Council's Climate Change Strategy.	Feasibility stage only – not likely to reduce emissions directly as just provides information on fleet emissions for future policy, but useful for encouraging future reductions.	None
10	Investigate the feasibility of introducing emissions-based parking tariffs.	Feasibility stage only, no data on how much this action would result in residents purchasing electric vehicles – likely to be complementary to other actions around encouraging EVs. Therefore, cannot quantify.	Low
11	Promote the use of "cleaner technology and fuels" within Spelthorne.	There is currently no data on what shift this might entail as will be dependant on level of interventions. However, the EFT has been run using 2026 fleet, for the A30 within the AQMA (DfT Site Number 17749) and used to assess the reduction in road NOx	Medium

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
		assuming an additional 5% of electric cars (i.e. EFT default fleet assumes 7% Electric Cars which has been increased to 12% assuming reductions in conventional diesel and petrol cars (i.e. half of the reductions from each). The same calculation has been undertaken assuming the 7% electric cars in the fleet increase to 17%. The 5% increase will result in a 4.7% reduction in road NOx on this road, and the 10% increase in EVs would result in an 11.0% reduction in road NOx.	
12	Deliver EV taxi programme to encourage taxi companies and drivers to invest in electric fleets.	Taxis are relatively small proportion of the fleet, and the same principles as calculated for Action 11 apply, but absolute reductions will be smaller. Cannot be quantified in detail as unclear as to the proportion of taxis on the road, how many taxis would become electric and how much mileage they would undertake per year.	Low
13	Supporting air quality research and providing public information regarding air quality, including an air alert for vulnerable members of the population.	Providing information on air quality to the public would be with the aim to change behaviour, but difficult to quantify what that change might be (and hence resulting changes in emissions). Air alert designed to change exposure, rather than emissions.	Low
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.	SBC has very little influence over Heathrow operations, but will lobby	Low (will depend on what decisions are taken nationally)
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.	Raising awareness of the health implications of poor air quality would be with the aim to change behaviour, but difficult to quantify what that change might be (and hence resulting changes in emissions).	Low

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
16	Implement further Local Street Improvements (LSIs), or similar schemes.	Much of the work on the evaluation of 'Mini–Holland' Schemes (designed with significant investment to increase cycling and walking rates in 3 outer London Boroughs), including Low Traffic Neighbourhoods specifically, has been undertaken by Rachael Aldred and colleagues at University of Westminster[47]. Research, based on three years of study following the implementation of Transport for London's (TfL) Mini-Holland Programme, indicates that implementing LTNs within these schemes was more likely to result in reduced levels of car ownership, and a reduction in the average minutes of car use in any given week, by residents. Although they may have been implemented in a different context, this provides quantified evidence of the impacts of LTNs, LSIs etc.	Low to Medium
17	Junction improvements to increase capacity and improve road layouts linked to new developments.	Ultimately this is aiming to reduce congestion, and hence emissions, but will, to some extent, be offset by increases in vehicles. No specific schemes have traffic data available for quantification of air quality impacts.	Unknown
18	Promoting Alternative Travel – Delivery of bus priority measures, cycle parking and interchange opportunities.	Further encouragement of modal shift to active travel and public transport. Unclear what behaviour change this could result in, and likely to work in conjunction with other measures within the plan to reduce private vehicle use. See assumptions for actions 24-26.	Low (but potentially medium in conjunction with other measures)
19	The Council will work with Knowle Green Estate and suppliers to promote retrofit, insulation, energy efficiency and adaptation measures.	Difficult to quantify as unclear what impact these measures will have on gas use within properties on Knowle Green Estate – at this stage, data not available on magnitude of gas reductions.	Low

[47] See http://rachelaldred.org/research/low-traffic-neighbourhoods-evidence/.

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
20	To investigate the feasibility of introducing Air Quality Supplementary Planning Guidance.	Feasibility process only. Emissions reductions from Supplementary Planning Document cannot be quantified as difficult to judge the impacts on developments overall. Potentially medium in longer term if successful	Low to Medium
21	Increase Spelthorne Smoke Control Area to cover the whole borough.	Will not have any impact on NOx but could potentially reduce $PM_{2.5}$ if accompanied by information campaign and resulting behaviour change (reduction in wood burning/ switch to seasoned wood)	Low to medium ($PM_{2.5}$)
22	To continue to fund a comprehensive air quality monitoring network including automatic monitoring of PM_{10} and $PM_{2.5}$.	Does not directly reduce emissions but adds to evidence base for air quality work.	None
23	Refresh bonfires and anti-idling campaign.	Likely to be relatively small sources overall, but potentially significant locally. Difficult to quantify as very localised impacts only.	Low
24	Continue to implement Cycling for Health.	Measures to increase cycling and walking could potentially be quantified together, although the impacts on behaviour are difficult to quantify. The Mini-Holland programme is part of the Mayor's Healthy Streets approach[48]. Substantial investment (around £100 million) is helping three Outer London boroughs, transform into cycling hubs, equipped with high specification Dutch-style infrastructure. Changes include redesigned junctions that are safer for cyclists and pedestrians, segregated cycle lanes on busy roads and reductions in the amount of traffic using residential streets. Longer term studies have examined travel behaviour change over three years of major investments in active travel	Low (but potentially medium in conjunction with other measures)
25	Bikeability School Cycling Proficiency training and Feet First Walking Training.		
26	Continue to implement Walking for Health.		

[48] See https://www.london.gov.uk/what-we-do/health/transport-and-health/healthy-streets.

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
		infrastructure. Aldred *et al (2021)*[49] found that for respondents living close to the Mini-Holland interventions, there was a consistent increase in duration of active travel compared with a control group. Changes in active travel behaviour were stronger in the high dose area (defined based on officer information on where main interventions were implemented) than in the low dose areas. Most of the increase was in walking, with a lesser increase in cycling. Published data do not indicate whether this switch is likely to be from private vehicles, or from public transport, and the detailed air quality impacts of these changes have not been assessed.	
27	Continue to implement School and Business Travel Plans.	A study published by Cairns and Newson demonstrated that school travel plans can be extremely effective in delivering a number of socially desirable goals, including traffic and congestion reduction, and a range of health gains. Moreover, it seems possible to achieve significant changes in travel behaviour at all types of school, and in all types of location, although different strategies are likely to be needed for different circumstances. As schools traffic is only a proportion of traffic, judged to be small impact in AQMA overall.	Low
28	Support work on the Health and Wellbeing Strategy.	Again, difficult to quantify this action specifically, but will add to overall public awareness and resulting behaviour change.	Low
29	Continue to promote sustainable transport/ homeworking with staff to reduce travel and	This would be quantified if data were available on council employee travel and changes through these promotions, but at this stage, this data is not held by SBC.	Small

[49] Aldred, R., Woodcock, J. and Goodman, A. (2021) 'Major investment in active travel in Outer London: Impacts on travel behaviour, physical activity and health', Journal of Transport and Health, vol. 20

Action No.	Action	Assumptions for Quantification	Assumed air quality impact in AQMAs
	explore schemes offering Council employees alternatives to private vehicle use.		
30	Continue collaboration with Heathrow Airport Ltd to reduce emissions arising from the operation of Heathrow Airport.	SBC has very little influence over Heathrow operations, and difficult to quantify the effects of collaborative working	Small
31	Support Traffic Management interventions to reduce road traffic emissions either through smoothing traffic flow or reducing vehicle use.	No specific schemes which could be quantified. Would need to have traffic data from SCC which is resource intensive for SCC, then resource intensive to undertake the AQ modelling.	Small (and localised)
32	Support and help implement the Spelthorne Local Cycling and Walking Infrastructure Plan	See assumptions for measures 24, 25 and 26	Low (but potentially medium in conjunction with other measures)

In order to provide an indication of cost effectiveness, Table 5.3 has been determined using best professional judgement to clearly set out impact from table 5.2 above (i.e., effectiveness) and cost in a qualitative way. Although the impacts for many of the actions is judged to be low individually, as a package, and over a number of years, the impacts of the measures will cumulatively be much larger.

The analysis also accounts for the feasibility of implementing the measures, with those likely to progress given a higher priority than those which are acknowledged to be a challenge to implement. The feasibility score factors in influences such as accessibility to funding, resources being available and political backing.

These three criteria are then combined to provide a priority 'score' by scoring high, medium and low for each parameter on a 1 to 3 basis and multiplying the scores.

Criteria to allow for the analysis of cost and feasibility are included below.

Cost: *Low* - < £50K; *Medium* - £50K-£500K; *High* - >£500K

Feasibility: *High* – measure has already been started, good political will and likely to be sufficient resources. *Medium* – possible to implement, but may require some further feasibility work, and/ or additional support and resources. *Low* – difficult to implement, lack of political will to implement, time and resource intensive.

Table 5.3 – Cost Effectiveness of AQAP Actions

Action No.	Action	Impact on Air Quality	Cost	Feasibility
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 $PM_{2.5}$ through planning which are likely to be in place within the timeframe of this plan.	Medium to High	Medium	High
2	Establishment of a Climate Change Working Group.	Low	n/a	High
3	Update the Surrey-wide Air Quality Modelling which was completed in 2019 to incorporate up to date input data.	None	Low	Medium
4	Lobby for and support any future measures by Transport Authorities to encourage and facilitate the use of low emission buses in Spelthorne.	Low	Unclear	Medium
5	Develop a Green Infrastructure strategy to support the Local Plan.	Low	Low	Medium
6	Promote access to grant funding for renewable energy installations for residents including Solar Together.	Low	Low	Medium
7	Incorporate energy efficiency measures and renewables into conversions, refurbishments, and maintenance of Council buildings and housing developments.	Low	High	Medium

Action No.	Action	Impact on Air Quality	Cost	Feasibility
8	Converting 50% of the Council fleet to electric or hydrogen by 2028 as stated in SBC's response to the Climate Emergency.	Low	High	Medium
9	To investigate the feasibility of producing annual emissions data for the Councils fleet vehicles in line with the Council's Climate Change Strategy.	None	Low (per annum)	Medium
10	Investigate the feasibility of introducing emissions-based parking tariffs.	Low	Low	Medium
11	Promote the use of "cleaner technology and fuels" within Spelthorne.	Medium	Unclear	High
12	Deliver EV taxi programme to encourage taxi companies and drivers to invest in electric fleets.	Low	Medium	Medium
13	Supporting air quality research and providing public information regarding air quality, including an air alert for vulnerable members of the population.	Low	Low	High
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.	Low (will depend on what decisions are taken nationally)	Low	High

Action No.	Action	Impact on Air Quality	Cost	Feasibility
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.	Low	Low	High
16	Implement further Local Street Improvements (LSIs), or similar schemes.	Low to Medium	Unclear	Low
17	Junction improvements to increase capacity and improve road layouts linked to new developments.	Unknown	High	Medium
18	Promoting Alternative Travel – Delivery of bus priority measures, cycle parking and interchange opportunities.	Low (but potentially medium in conjunction with other measures)	High	Medium
19	The Council will work with Knowle Green Estate and suppliers to promote retrofit, insulation, energy efficiency and adaptation measures.	Low	Not costed at present	Medium
20	To investigate the feasibility of introducing Air Quality Supplementary Planning Guidance.	Low to Medium	Low	Medium
21	Increase Spelthorne Smoke Control Area to cover the whole borough.	Low to medium ($PM_{2.5}$)	Low	High

Action No.	Action	Impact on Air Quality	Cost	Feasibility
22	To continue to fund a comprehensive air quality monitoring network including automatic monitoring of PM_{10} and $PM_{2.5}$.	None	Low	High
23	Refresh bonfires and anti-idling campaign.	Low	Low	High
24	Continue to implement Cycling for Health.	Low (but potentially medium in conjunction with other measures)	Low	High
25	Bikeability School Cycling Proficiency training and Feet First Walking Training.		Unknown	High
26	Continue to implement Walking for Health.		Unknown	High
27	Continue to implement School and Business Travel Plans.	Low	Low	High
28	Support work on the Health and Wellbeing Strategy.	Low	Medium	High
29	Continue to promote sustainable transport/ homeworking with staff to reduce travel and explore schemes offering Council employees alternatives to private vehicle use.	Small	Low	High
30	Continue collaboration with Heathrow Airport Ltd to reduce emissions arising from the operation of Heathrow Airport.	Small	Low	High
31	Support Traffic Management interventions to reduce road traffic emissions either through smoothing traffic flow or reducing vehicle use.	Small (and localised)	Depends on scheme	Medium

Action No.	Action	Impact on Air Quality	Cost	Feasibility
32	Support and help implement the Spelthorne Local Cycling and Walking Infrastructure Plan	Low (but potentially medium in conjunction with other measures)	High	Medium

Appendix A: Response to Consultation

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

Consultee	Category	Summary of Response
The Secretary of State	Statutory	DEFRA Appraisal was undertaken in May 2024. The Draft AQAP was accepted with commentary that have been addressed in the final plan.
The Environment Agency	Statutory	Unfortunately, the EA are not able to provide detailed comments on every Air Quality Action Plan received. However, a summary of the issues/priorities (including for The Environment Agency role in Air Quality, statements about preferred position, traffic, developments, non-road mobile machinery, waste management sites, regional approach to local air quality and a summary) that are common to each AQAP was provided. SBC intention to work collaborative with other stakeholders was noted. The EA is not aware of any waste facilities in the borough of Spelthorne that are causing or contributing to failures of air quality standards.
The highways authority	Statutory	The Transport Policy Team's response to the draft AQAP consultation was as follows: - Agree with the aims and actions identified within the AQAP. Measure 16 refers to 'Liveable Neighbourhoods'. These have now been renamed 'Local Street Improvements' (LSIs). More information on the County's LSI programme is available

Consultee	Category	Summary of Response
		here: https://www.surreycc.gov.uk/roads-and-transport/policies-plans-consultations/transport-plan/strategies/local-street-improvements We recommend that the reference to 'Liveable Neighbourhoods' within the AQAP be replaced with 'Local Street Improvements' because the Liveable Neighbourhoods programme is now the Local Street Improvements Programme. The Spelthorne Local Cycling and Walking Infrastructure Plan (LCWIP) is the primary plan for implementing walking and cycling improvements in Spelthorne. It will be used by SCC as the primary document for securing funding for walking and cycling infrastructure in the borough. It is much more wide reaching than the Local Street Improvements programme, whose schemes are much smaller and more local in scale. It is important that, as the key vehicle for implementing cycling and walking infrastructure in the borough, the LCWIP is named as a standalone measure. This is consistent with other AQAPs from districts and boroughs across the county that have an LCWIP in place, as Spelthorne does.
All neighbouring local authorities	Statutory	Consultation made but no response received.
Other public authorities as	Statutory	Consultation was made and a response was received from public health online via the questionnaire.

Consultee	**Category**	**Summary of Response**
appropriate, such as Public Health officials		PH followed with an email to add that, *under the Housing and Planning section on page 10, Spelthorne may wish to sign up to the Healthy Homes Principles which covers indoor and ambient air pollution. Healthy Homes Principles - Town and Country Planning Association (tcpa.org.uk)*
Bodies representing local business interests and other organisations as appropriate	Statutory	Consultation was made but no response received on a headed letter.
General Public	Non-statutory	Most suggestions and general comments made, related to the following issues: - ○ localised traffic problems and congestion, ○ the inadequacy of heat pumps, said to create noise pollution and costly to implement, ○ the suggestions for more charging points to be deployed across the borough.

Consultee	**Category**	**Summary of Response**
		○ lack of funding to purchase electric vehicles, ○ poor and localised road safety, ○ The requirement for more cycling and walking infrastructure, ○ the inadequacy of pavements for disabled people, ○ the significant number of potholes and the need for the road to be repaired. ○ Suggestion of vegetation clearance along roads and subways, ○ the perceived impact of the EcoPark waste incinerator on air pollution and ○ the perceived environmental impacts of Heathrow Airport operations. It must be noted that where the scope of a request/comment/suggestion made was outside the remit of SBC, the responses have been referred to the relevant third-party organisation/partner for comment, action or for consideration during the compilation of their future strategies /policies.

A Consultation response report outlining all detailed responses to the Consultation is available on our website.

Appendix B: Reasons for Not Pursuing Action Plan Measures

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

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
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.	Not a large contributor to emissions in Spelthorne – proportionate measures included in the AQAP
Freight and Delivery Management	Freight consolidation	Not considered suitable measure for the AQMA

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

LTP	Local Transport Plan
NHS	National Health Service
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PHOF	Public Health Outcomes Framework
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
SBC	Spelthorne Borough Council
SCC	Surrey County Council
SPD	Supplementary Planning Document
ULEZ	Ultra Low Emission Zone
WHO	World Health Organization