
**Bath & North East
Somerset Council**

Improving People's Lives

Bath Air Quality Action Plan

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

June (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 the city of Bath in Bath and North East Somerset Council between 2024-2029.

This AQAP supplements the Clean Air Plan which has successfully passed a State 3 assessment, which means concentrations across Bath have been maintained below 40 µg/m³ for 2 years. The Clean Air Plan forms part of the Government's Local NO₂ Plan initiative which is separate from the LAQM framework. Whilst the regimes are separate the plans will be complementary with both designed to reduce NO₂. Measures from the Clean Air Plan are incorporated into the AQAP tables.

This action plan replaces the previous action plan which ran from 2011-2024 and covers the Bath Air Quality Management Area. Projects delivered through the past action plan and the Clean Air Plan include: introducing a Clean Air Zone (CAZ), retrofitting buses, traffic management and a promotional website. The combination of these actions has reduced concentrations in Bath to below 40 µg/m³.

A separate AQAP covers the [Temple Cloud and Farrington Gurney AQMA](#)¹.

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{2,3}.

¹ <https://beta.bathnes.gov.uk/sites/default/files/Farrington-Gurney-and-Temple-Cloud-Air-Quality-Action-Plans-2023.pdf>

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

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion⁴. Bath and North East Somerset Council is committed to reducing the exposure of people in Bath and North East Somerset to poor air quality in order to improve health.

We have developed actions that can be considered under 7 broad topics:

- Policy guidance and development control
- Promoting low emission plants
- Promoting low emission transport
- Promoting travel alternatives
- Transport planning and infrastructure
- Traffic management
- Vehicle fleet efficiency

The Council's key priorities include;

- Continuing to progress along JAQU's road map to success in terms of compliance with nitrogen dioxide limits within the Clean Air Zone.
- The roll out of Liveable Neighbourhoods and supporting Residents Parking Zone scheme.
- Encouraging active travel.
- Close cooperation with the Sustainable Economy Service on the declared Climate Emergency and planned carbon neutrality by 2030 across the authority area, and use of green infrastructure.
- Development of an Air Quality Strategy.

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

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

work with regional and central government on policies and issues beyond Bath and North East Somerset Council's direct influence.

Responsibilities and Commitment

This AQAP was prepared by the Environmental Monitoring Team of Bath and North East Somerset Council with the support and agreement of the following officers and departments:

- Climate and Engagement
- Energy Transformation
- Planning & Conservation
- Planning Policy
- Traffic Management and Network
- Active Travel
- Green Infrastructure & Nature Recovery
- Transport Development & Policy
- Parking Services
- Public Health & Prevention
- CAZ Project Team
- Liveable Neighbourhoods

This AQAP has been approved by:

Head of Service – Community and Compliance (Lynda Deane); Environmental Protection and Licensing Manager (Aled Williams); Head of Highways Delivery (Gary Peacock); CAZ Service Manager (Dan Arthur).

This AQAP has been signed off by the Director of Public Health & Prevention, Rebecca Reynolds.

This AQAP will be subject to an annual review and appraisal of progress. Progress each year will be reported in the Annual Status Reports (ASRs) produced by Bath

and North East Somerset Council, as part of our statutory Local Air Quality Management duties.

If you have any comments on this AQAP please send them to Environmental Monitoring Team at:

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Table of Contents

Executive Summary	i
Responsibilities and Commitment.....	iii
1 Introduction	1
2 Summary of Current Air Quality in Bath	2
3 Bath and North East Somerset Council’s Air Quality Priorities	4
3.1 Public Health Context.....	4
3.2 Planning and Policy Context.....	4
3.2.1 National	5
3.2.2 Regional	6
3.2.3 Local	8
3.3 Source Apportionment.....	15
3.4 Required Reduction in Emissions.....	18
3.5 Key Priorities	18
4 Development and Implementation of Bath and North East Somerset Council AQAP	20
4.1 Consultation and Stakeholder Engagement.....	20
5 AQAP Measures	21
Appendix A: Response to Consultation	27
Appendix B: Reasons for Not Pursuing Action Plan Measures	28
Appendix C: Actions from previous Action Plans and Clean Air Plan which have been completed	29
Glossary of Terms	37
References	39

List of Tables

Table 3.1 - Source apportionment at Walcot Parade (DT224).....	16
Table 3.2 - Source apportionment at Wells Road (DT020).....	17
Table 4.1 – Consultation Undertaken	20
Table 5.1 – Air Quality Action Plan Measures	22
Table A.1 – Summary of Responses to Consultation and Stakeholder Engagement on the AQAP	27
Table B.1 – Action Plan Measures Not Pursued and the Reasons for that Decision.	28
Table C.1 – Measures from previous Action Plans and the Clean Air Plan which have been completed	29

List of Figures

Figure 3.1 - Graphical representation of the source apportionment (%) at Walcot Parade (DT224).....	16
Figure 3.2 - Graphical representation of the source apportionment (%) at Wells Road (DT020)	17

1 Introduction

This report outlines the actions that Bath and North East Somerset 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 city of Bath.

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 Bath and North East Somerset Council's air quality ASR.

This AQAP supplements the Clean Air Plan which has successfully passed a State 3 assessment, which means concentrations across Bath have been maintained below 40 µg/m³ for 2 years. The Clean Air Plan forms part of the Government's Local NO₂ Plan initiative which is separate from the LAQM framework. Whilst the regimes are separate the plans will be complementary with both designed to reduce NO₂. Measures from the Clean Air Plan are incorporated into the AQAP tables.

2 Summary of Current Air Quality in Bath

Please refer to the [latest ASR](#) from Bath and North East Somerset Council for full monitoring details.

Monitoring results can also be seen online, the [UK Air Quality](#) webpage presents automatic monitoring results for Bath & North East Somerset Council automatic sites, with automatic monitoring results also available through the [UK-Air website](#) (the London Road Continuous NO₂ analysers is listed as Bath Roadside (until June 2019) and Bath A4 Roadside (from October 2019)). An interactive map showing diffusion tube locations and monitoring trends is available at [Bath & North East Somerset Council – Nitrogen dioxide Monitoring Data](#).

The nitrogen dioxide (NO₂) monitoring results in 2023 showed all continuous analysers were below the annual average objective of 40 µg/m³ and there were no exceedances of the 1-hour objective (18 exceedances allowed). With NO₂ concentrations reducing by an average of 6% compared to results in 2022.

Monitoring continued at 129 diffusion tubes sites in Bath in 2023. The results showed that in 2023 the annual average objective was not exceeded in Bath, with concentrations of NO₂ lower than in 2022 by an average of 9% across the network.

There are 2 sites in Bath (DT224 and DT304 on Walcot Parade) having levels which are between 36-40 µg/m³ at the monitoring site. Both sites were below 36 µg/m³ at the nearest façade. These monitoring sites are within the Bath AQMA.

Under the Environment Act 1995 Part IV (section 83), an Air Quality Management Area (AQMA) can be revoked if following a subsequent air quality review, it is shown that the air quality objectives are being achieved and are likely to remain so. The Technical Guidance (LAQM.TG22) states “The revocation of an AQMA should be considered following three consecutive years of compliance with the relevant objective as evidenced through monitoring. Where Nitrogen Dioxide (NO₂) monitoring is completed using diffusion tubes, to account for the inherent uncertainty associated with the monitoring method, it is recommended that revocation of an AQMA should be considered following three consecutive years of annual mean NO₂ concentrations being lower than 36µg/m³ (i.e. within 10% of the annual mean NO₂ objective).” Based on the monitoring in 2023, and roadside projection factors published by DEFRA it is

estimated that this will be met at all sites within the Bath AQMA by end of 2025. Monitoring will continue across the city and the AQMA will be reviewed each year in the ASR and an assessment will be made to determine if the AQMA can be revoked.

The AQMA also includes the NO₂ 1-hour objective. This has been met at the continuous monitoring sites for several years. Monitoring using the diffusion tubes have also remained below 60 µg/m³ since 2019, it is unlikely that there has been an exceedance of the 1-hour objective. The Council do not intent to amend the AQMA to remove the 1-hour objective due to the relationship with the annual mean NO₂ objective. Therefore, the Council will continue to monitor and will review each year in the ASR.

As the AQMA covers small sections of a number of wards it was necessary to estimate the population with the AQMA using the number of residential properties within the AQMA and average number of people per household. Using the 2021 census data, it was established that the average number of people per household in wards in the AQMA is 2.31. GIS was used to count the number of households in the AQMA (approximately 3,000) and thus it was calculated that the number of residents within the AQMA to be approximately 7000 (it should be noted that only properties whose façades were within the AQMA boundary were included).

3 Bath and North East Somerset Council's Air Quality Priorities

3.1 Public Health Context

Breathing in polluted air affects our health and costs the NHS and our society billions of pounds each year. Air pollution is recognised as a contributing factor in the onset of heart disease and cancer and can cause a range of health impacts, including effects on lung function, exacerbation of asthma, increases in hospital admissions and mortality. In the UK, it is estimated that the reduction in healthy life expectancy caused by air pollution is equivalent to 29,000 to 43,000 deaths a year⁵.

Air pollution particularly affects the most vulnerable in society, children, the elderly, and those with existing heart and lung conditions. Additionally, people living in less affluent areas are most exposed to dangerous levels of air pollution⁶.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion⁷. Bath and North East Somerset Council is committed to reducing the exposure of people in Bath and North East Somerset to poor air quality in order to improve health.

3.2 Planning and Policy Context

There are several Policies and Strategies of national, regional, and local scale that have implications for air quality, and provide guidance and direction to achieve improvement in air quality. These are explored in more detail below.

⁵ UK Health Security Agency. Chemical Hazards and Poisons Report, Issue 28, 2022.

⁶ Defra. Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

⁷ Defra. Abatement cost guidance for valuing changes in air quality, May 2013

3.2.1 National

National Planning Policy Framework

The Government's planning policies are set out in the National Planning Policy Framework (NPPF) which was most recently revised in December 2023.

Air quality is specifically mentioned within Section 9: Promoting sustainable travel and Section 15: Conserving and enhancing the natural environment. The following quote from Section 15 sets out the consideration that should be given to Air Quality Management Areas and air quality in planning policies and decisions:

“Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.”

In line with the NPPF, measures that seek to improve air quality or mitigate the potential impacts of development should be identified and implemented.

Major Road Network

In 2018 the Government's Department for Transport adopted the proposal to create a 'Major Road Network' (MRN) in line with the Transport Investment Strategy. The intention being that the MRN would form an intermediate level between the national Strategic Road Network (SRN) and the rest of the local road network.

Five central objectives of the MRN were set out, these are as follows:

- Reduce congestion
- Support economic growth and rebalancing

- Support housing delivery
- Support all road users
- Support the Strategic Road Network

The A36 through Bath has been indicated on the proposed MRN. As a result, the A36 is included within the final MRN, so a new funding stream could be available for major schemes and improvements that aim to raise the performance standards of the network, but the potential for this is limited as air quality is not listed as an objective and proposals related to bypasses, missing links, major structural works, major junctions and use of smart technology over £20m, take precedence.

3.2.2 Regional

West of England Joint Transport Study and Joint Local Transport Plan 4

The West of England Joint Transport Study (JTS) is a technical report which covers the long-term transport vision, up to 2036 and beyond, for the West of England region and aims to identify long term transport deficiencies and necessary improvements to mitigate the proposed growth in housing and jobs in the Joint Spatial Plan. The study recognises poor air quality, caused by traffic, as an important challenge and one that causes ill health and premature deaths. It also recognises that a growing economy could place additional pressure on the road network.

Following on from this, Joint Local Transport Plan 4 has been developed and has been adopted in March 2020. One of the five overarching objectives of the JLTP4 is to take action on climate change and address poor air quality in the city region. The JLTP recognises the challenges faced by the region, in terms of growth in travel demand and the negative impact this will have on air quality levels. It also acknowledges the increased need to improve the offer of more sustainable modes of transport, to overcome this challenge as well as tackling the our climate emergency. And as part of sustainable communities, ensuring people are connected to places they want to access. Active Travel not only benefits people's health and the environment but can address inequalities in choices/access to wide range of facilities and places including for work, school, leisure, including inequalities due to affordability/income.

Poor air quality has significant impacts on human health, which risks holding back economic growth due to the impacts of poor health on productivity. The Local Policy L5 will 'Support the identification and implementation of measures that will improve air quality'. This AQAP aims to address the issue of poor air quality in Bath, and some of the measures within the plan relate specifically to traffic management, policy guidance and promoting travel alternatives. The AQAP is therefore in line with the objectives set out in the JTS.

Go Ultra Low West

Go Ultra Low West is a £7 million joint project between the West of England authorities. The project aims to accelerate and encourage the uptake of electric vehicles across the region.

The main objectives of the project include: to double the number of public electric vehicle charge points on the Revive network and install four new charging hubs across the region. Electric vehicles are zero emission in terms of nitrogen dioxide, and their uptake - where replacing existing conventional internal combustion engine vehicles - results in an improvement in local air quality.

Charge point sites are being planned, including for rapid chargers (circa. 30 minute recharge) in Bath, Keynsham and Radstock and fast chargers (2 to 4 hour recharge) in Midsomer Norton, and numerous locations in Bath.

This work could result in an increase of up to 44 charging bays across the authority area and complement the existing publicly available charge points.

City Region Sustainable Transport Settlement (CRSTS)

The National Infrastructure Strategy committed to investment in local transport networks to improve productivity in the UK largest cities. The CRSTS programme aims to deliver transformational change through investments in public and sustainable transport infrastructure in some of England's largest city regions. CRSTS funding is targeted at the following objectives:

- drive growth and productivity through infrastructure investment;
- level-up services towards the standards of the best; and

- decarbonise transport, especially promoting modal shift from cars to public transport, walking and cycling.

The settlement is in addition to existing funding streams, including bus revenue support, cycling and walking funding, Local Electric Vehicle Charging funds etc.

Proposed work packages focus on improving key strategic corridors and the linkages into those corridors, particularly across the bus network.

West of England Mayoral Combined Authority (MCA) aims to support strong, active and inclusive communities, who are informed and involved in decision-making enabling MCA to improve the region to enhance the quality of life for the South West residents. The co-ordinated solution has been developed following extensive joint working with the local authorities of Bristol, South Gloucestershire, and Bath and North East Somerset, supported by an extensive programme of stakeholder engagement.

West of England Mayoral Combined Authority (MCA) has some work-packages that will improve the strategic public transport corridors, walking and cycling. The Combined Authority will invest in walking and cycling facilities across the region, to improve the attractiveness of active travel, including new modes such as e-scooters. The facilities include increased provision of cycle parking spaces and off-road and segregated walking and cycling routes.

3.2.3 Local

Corporate Strategy 2023-2027

The Corporate Strategy 2023-2027 is the Council's overarching strategic plan. It builds on a previous strategy whilst retaining purpose, values, and core policies, whilst also introducing an extended outcomes framework to further refine the priorities.

The Council has one overriding purpose – to improve people's lives. This brings together everything we do and continues to be the foundation for our strategy and ensure that it drives our commitments, spending and service delivery. We have two core policies – tackling the climate and ecological emergencies and giving people a bigger say. These shape all our work and we have expanded these policies with ambitions to lead the UK in climate and nature action, building a sustainable future

for Bath and North East Somerset- net zero, nature positive by 2030 and to listen to and work with residents to act on their concerns.

To continue to translate our purpose into commitments, we have identified three core principles: preparing for the future, delivering for local residents and focusing on prevention. Further information can be found here:

<https://beta.bathnes.gov.uk/document-and-policy-library/corporate-strategy-2023-2027>

Climate Emergency Action Plan

Alongside other local authorities in the West of England region, B&NES declared a climate emergency in 2019 and committed to provide the leadership to enable the district to be net zero by 2030.

In response to this, the Climate Emergency Strategy was published in 2019, and updated in 2023, setting out the Council's ambition to provide the leadership to enable the district to become carbon neutral by 2030, as well as doing the same for the council's own operations⁸. It outlines the strategic priorities for action, which inform more detailed policies and delivery plans across the Council, as well as influencing partners who work alongside the services the Council delivers⁹. The Strategy sets out four strategic priorities:

- Decarbonising buildings;
- Decarbonising transport;
- Increasing renewable energy generation; and
- Cutting council operational emissions to net zero by 2030.

Each year, B&NES publishes an annual report on our emissions reduction progress alongside an updated Climate Action Plan. This provides an overview of our progress as an organisation and as a district, with updates on the priority actions against the strategic priorities. Many of the actions within offer the co-benefit of improving air

⁸ Bath and North East Somerset Council, 2019. Declaring a Climate Emergency.

⁹ Bath and North East Somerset Council, 2023. Climate Emergency Strategy.

quality. Previous year's Annual Progress Reports are available here:

<https://beta.bathnes.gov.uk/our-climate-reports> and the 2023-24 Annual Report will publish later this year.

The West of England Combined Authority also declared a climate emergency, setting the target for the West of England to become net zero carbon by 2030.

Ecological Emergency Action Plan

Recognising the severity of the degradation of the natural environment and loss of wildlife, and the consequences of this, B&NES declared an Ecological Emergency in July 2020. By taking a regional and national lead in responding to the Ecological Emergency, and working alongside communities and partners across the district, the primary aim is to restore nature.

Since declaring an Ecological Emergency, we have published an Ecological Emergency Action Plan outlining how we intend to further our work to address the Ecological Emergency and become nature positive by 2030. The Action Plan focuses on 45 actions that we believe will deliver the biggest impact for nature recovery¹⁰.

Additionally, as part of the Local Plan Partial Update (LPPU), we are committed to bringing forward the requirement to deliver Biodiversity Net Gain (BNG) for planning applications. Policy NE3a, which gained full statutory weighting in 2023, allows developments to only be permitted where a BNG of a minimum of 10% is demonstrated and secured in perpetuity (at least 30 years) on selected schemes¹¹. Further options and approaches are also being explored to require more than 10% BNG on selected schemes, this will form part of the new Local Plan.

Additional information can be found here: <https://beta.bathnes.gov.uk/biodiversity-net-gain-bng>

We are reviewing our Green Infrastructure Strategy incorporating Natural England Green Infrastructure Framework Standards including standards for Urban Tree

¹⁰ Bath and North East Somerset Council, 2023. Ecological Emergency Action Plan.

¹¹ Bath and North East Somerset Council, 2023. New Policy NE3a Biodiversity Net Gain.

Canopy Cover and Urban Greening Factor. The new GI Framework for Bath and North East Somerset will provide evidence for the Local Plan revised GI policies including requirements for major development. Green infrastructure helps address key issues including impacts from climate change, loss of biodiversity, obesity, inactive lifestyles, reduces noise and air pollution. It provides many benefits including reducing urban heat impact, air pollution and surface water flooding and creating healthy environments that encourage active travel.

Journey to Net Zero Transport Plan

The Journey to net Zero (JNZ) sets out a plan to tackle some of the biggest transport-related challenges our society faces: combating climate change, improving air quality, improving health and wellbeing, and tackling congestion.

In line with our commitments from the Climate and Ecological Emergency, the current ways in which we travel will not get us to carbon neutrality by 2030¹². The JNZ sets out the changes needed to our transport system to create places we want to work and live with better connected, healthier and sustainable communities, and sits alongside other Council activities to reduce carbon emissions.

We have placed people at the centre of the Journey to Net Zero, focusing on providing transport infrastructure and environments that will encourage the use of sustainable modes of transport by making them a genuine alternative to the car. This will involve reducing the dominance of the private car while maintaining access for those whose needs cannot easily be met by more sustainable modes. This plan focuses primarily on the City of Bath, but also recognises the importance of the travel corridors between the city and the wider district¹³.

Local Plan

The Local Development Plan is made up of a series of documents that are the starting point for all local Planning decisions. It comprises of B&NES-specific plans,

¹² Bath and North East Somerset Council, 2023. Climate Emergency Strategy.

¹³ Bath and North East Somerset Council. Journey to Net Zero: Reducing the Environmental Impact of transport on Bath.

joint regional plans which cover the West of England region, and more local documents created by individual parishes or wards. The key local documents are the Core Strategy (2014), Placemaking Plan (2017) and Local Plan Partial Update (2023¹⁴).

Bath and North East Somerset Council has been preparing a new local plan for the district to cover the period up to 2042. Bath & North East Somerset Council will be working with our three neighbouring West of England councils and West of England Mayoral Combined Authority (MCA) to positively address the strategic planning needs the region.

The plan makes direct references to the Bath Air Quality Management Areas to ensure they are given consideration when assessing development plans.

Bath and North East Somerset Council's current Placemaking Plan contains Policy PCS3 Air Quality:

1. *Development will only be permitted where the proposal:*
 - a) *does not give rise to polluting emissions which have an unacceptable adverse impact on air quality, health, the natural (in particular designated wildlife sites) or built environment or local amenity of existing or proposed uses from air polluting activities, or*
 - b) *is not located where it would be at unacceptable risk from, or be adversely affected by existing sources of odour, dust and /or other forms of air pollution.*
2. *New development located within an Air Quality Management Area should be consistent with the local air quality action plan.*

Where an air quality assessment is necessary to support an application, it should be proportionate to the nature and scale of development proposed and the level of concern about air quality.

This policy recognises the interactions between air quality and the planning system.

¹⁴ <https://beta.bathnes.gov.uk/policy-and-documents-library/development-plan-core-strategy-placemaking-plan-and-local-plan-partial>

Bath's Clean Air Plan

The Government's 'Air quality plan for nitrogen dioxide (NO₂) in UK (2017)' has placed legal obligations on many Local Authorities to develop local action plans to achieve statutory NO₂ limit values. The development of plans nationally may have wide reaching air quality implications.

In July 2017, Bath and North East Somerset Council (B&NES) was directed by the Joint Air Quality Unit (JAQU) to produce a Clean Air Plan (CAP) to achieve statutory NO₂ limit values within the shortest possible time.

The Council's Cabinet approved the full business case for a Class C Charging Clean Air Zone (CAZ) with Traffic Management at Queen Square alongside supporting measures in January 2020. A Class C CAZ imposes charges on higher emission buses, coaches, taxis, private hire vehicles, HGVs, vans and light goods vehicles (LGVs) that do not meet the minimum emission standards set out in the Government's Clean Air Zone Framework.

The minimum standards are as follows:

- Euro VI/6 diesel vehicles (registered from approximately 2015)
- Euro IV/4 petrol vehicles (registered from approximately 2006)

Taxis, private hire vehicles, vans and LGVs not meeting the required standards will be charged £9 per day for moving in the zone. HGVs over 3.5 tonnes, buses and coaches that don't meet the standards will be charged £100 per day.

The Bath Clean Air Zone became operational on 15th March 2021. Bath has successfully passed the State 3 assessment – maintaining success, showing the nitrogen dioxide concentrations have remained below the air quality objective at relevant receptors for 2 years.

The Bath Clean Air Plan is part of the Local NO₂ plan initiative which is separate to the Local Air Quality Management (LAQM) process. Whilst both processes are separate, they are complimentary as they are both designed to reduce pollution. This AQAP will work with the Bath Clean Air Plan to further reduce pollution across the city.

Joint Health and Wellbeing Strategy

The Health and Wellbeing Strategy is a seven-year strategy that sets out four priorities for improving health and wellbeing and reducing inequalities for the local population. It also identifies the approaches that will be taken to address them. The four priorities are as follows:

- Ensure that children and young people are healthy and ready for learning and education
- Improve skills, good work and employment
- Strengthen compassionate and healthy communities
- Create health promoting places

This strategy works closely with partners from health, social care, other local authorities, higher and further education, public services and community and social enterprise groups. The Health and Wellbeing board has worked to make sure this strategy influences and is influenced by other key strategies both internally and externally.

3.3 Source Apportionment

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

A source apportionment exercise was carried out by Bath and North East Somerset Council. Two key locations within the AQMA were looked at (Wells Road and Walcot Parade). Source apportionment was carried out using the method given in Chapter 7 (Box 7.5) in the Technical Guidance LAQM.TG22. The source apportionment calculations use the Emission Factor Toolkit (EFT) version 12.0.1, using a basic traffic split on an urban (not London) road and local traffic counts from 2023. The fleet split was adjusted using the bespoke option to account for the local fleet upgrades due to the CAZ.

Walcot Parade was given a speed of 32 kph and a gradient of 7.5%, Wells Road had a speed of 40 kph. Background concentrations were taken from the National Background Maps and adjusted to remove the major road contributions. Results of the source apportionment are shown in Table 3.1 and Figure 3.1 for Walcot Parade and Table 3.1 and Figure 3.1 for Wells Road.

Table 3.1 - Source apportionment at Walcot Parade (DT224)

Category	NO ₂ concentration (µg/m ³)	% Contribution
Highest Diffusion Tube reading	37.7	100
Regional background	3.0	8
Local background	6.7	18
Petrol Cars	2.2	6
Diesel Cars	13.3	35
LGVs	5.8	15
Rigid HGVs	1.8	5
Artic HGVs	1.3	3
Buses/Coaches	3.7	10
Motorcycles	0.03	0.1

Figure 3.1 - Graphical representation of the source apportionment (%) at Walcot Parade (DT224)

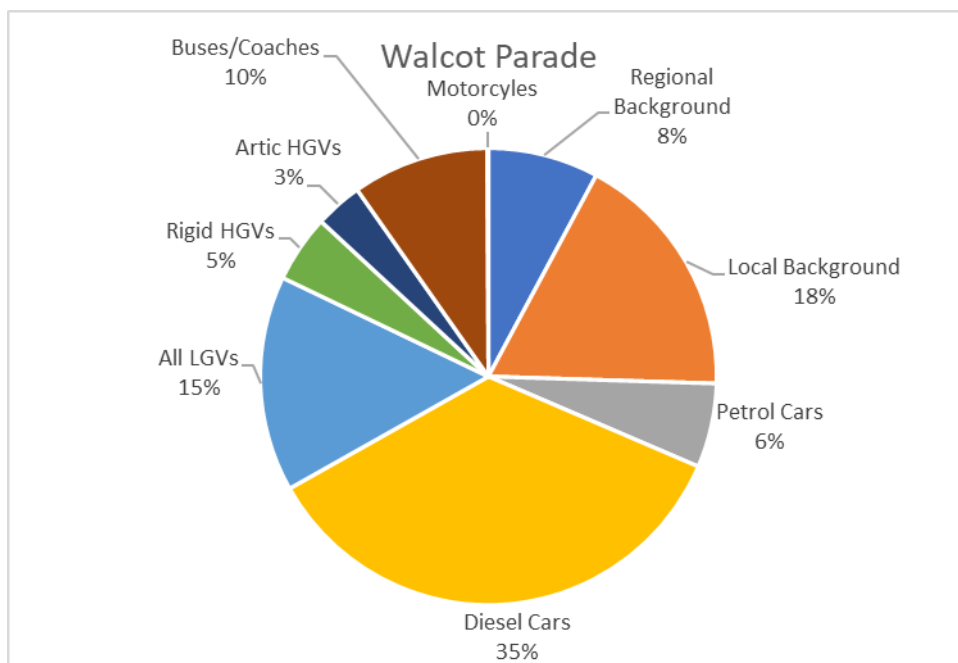
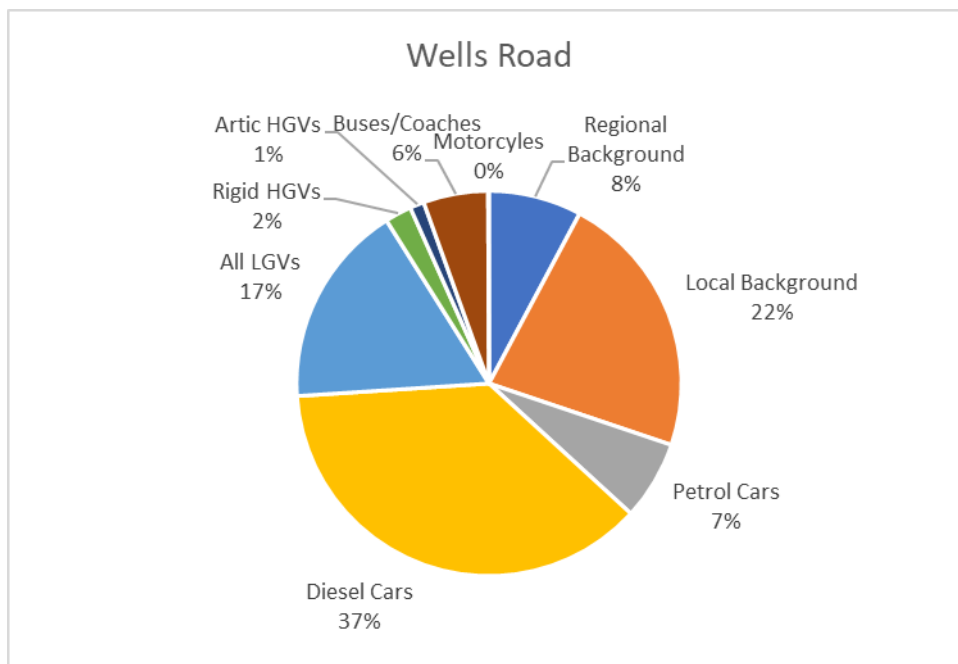


Table 3.2 - Source apportionment at Wells Road (DT020)

Category	NO ₂ concentration (µg/m ³)	% Contribution
Highest Diffusion Tube reading	34.9	100
Regional background	2.7	8
Local background	7.8	22
Petrol Cars	2.3	7
Diesel Cars	13	37
LGVs	6	17
Rigid HGVs	0.8	2
Artic HGVs	0.4	1
Buses/Coaches	1.9	5
Motorcycles	0.02	0.1

Figure 3.2 - Graphical representation of the source apportionment (%) at Wells Road (DT020)



3.4 Required Reduction in Emissions

As described in Chapter 2, pollution concentrations in Bath have reduced below the annual average air quality objective of 40 µg/m³.

The Technical Guidance LAQM.TG22 recommends considering revoking an AQMA when there have been at least 3 consecutive years below the objective, and if using diffusion tubes to measure NO₂, the recommended the concentrations are below 36 µg/m³ for 3 consecutive years to account for uncertainty in the monitoring.

The ASR (Table B.1) show that 2 monitoring sites remained above 36 µg/m³ at the monitors, and no sites were above 36 µg/m³ at the nearest receptors.

This AQAP aims to build on previous action plans and the Clean Air Plan to continue to lower concentrations to below 36 µg/m³ for 3 years to enable the AQMA to be revoked.

3.5 Key Priorities

With the NO₂ concentrations in Bath meeting the air quality objective, the priority for this AQAP is to continue to lower concentrations to below 36 µg/m³ for 3 years to enable the AQMA to be revoked.

Based on the source apportionment, a key area to focus on is to continue to reduce emissions from vehicles, particularly diesel cars and LGVs. The Council's key priorities include;

- Continuing to progress along JAQU's road map to success in terms of compliance with nitrogen dioxide limits within the Clean Air Zone.
- The roll out of Liveable Neighbourhoods and supporting Residents Parking Zones¹⁵.
- Encouraging active travel.

¹⁵ <https://beta.bathnes.gov.uk/liveable-neighbourhoods>

- Close cooperation with the Sustainable Economy Service on the declared Climate Emergency and planned carbon neutrality by 2030 across the authority area, and delivery of green infrastructure.
- Development of an Air Quality Strategy.
- To develop and publish a Supplementary Planning Document which aims to introduce guidance surrounding non-road mobile machinery.

4 Development and Implementation of Bath and North East Somerset Council AQAP

4.1 Consultation and Stakeholder Engagement

In developing/updating this AQAP, we have worked with other local authorities, agencies, businesses and the local community to improve local air quality. Schedule 11 of the Environment Act 1995 requires local authorities to consult the bodies listed in Table 4.1.

This is a draft AQAP which will be consulted on before the AQPA is adopted. This section will be updated when the stakeholder engagement has been completed.

The response to our consultation stakeholder engagement will be given in Appendix A: Response to Consultation, once consultation has been completed.

Table 4.1 – Consultation Undertaken

Consultee	Consultation Undertaken
The Secretary of State	<Yes/No>
The Environment Agency	<Yes/No>
The highways authority	<Yes/No>
All neighbouring local authorities	<Yes/No>
Other public authorities as appropriate, such as Public Health officials	<Yes/No>
Bodies representing local business interests and other organisations as appropriate	<Yes/No>

5 AQAP Measures

Table 5.1 shows the Bath and North East Somerset 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
BATH CAP 2	Charging Clean Air Zone	Promoting Low Emission Transport	Low Emission Zone (LEZ) or Clean Air Zone (CAZ)	2021	2021	Bath and North East Somerset Council	Joint Air Quality Unit CAZ Implementation Fund	No	Fully funded	£1m-£10m	Implementation	4 µg/m ³ (at key locations)	Measured annual average concentrations of NO ₂ . Number of monitoring sites (PCM and LAQM with façade adjustments) measuring above 40µg/m ³ .	Came into operation 15 th March 2021. B&NES passed the State 3 Assessment outlined by JAQU in 2022, defining the CAZ as having maintained success.	EXPECTED HIGH EFFECTIVENESS. Start date was delayed due to Covid-19.
BATH CAP 7	Weight restriction enforcement	Traffic Management	Other	2021	2025	Bath and North East Somerset Council	Joint Air Quality Unit CAZ Clean Air Fund	No	Fully funded.	£10-£50k	Implementation	Tbc	Number of vehicles exceeding weight limit before and after.	A webform to report allegations of breaches of vehicle weight restrictions was launched in 2022. Officers within Trading Standards are responding to complaints and carrying out proactive monitoring of roads carrying weight restriction limits. To date, seventeen cases of weight restriction contravention has been reported, with five further cases detected based on observation.	EXPECTED LOW EFFECTIVENESS. Some delay due to emerging moving traffic offences legislation.
BATH CAP 8	Anti-idling education and enforcement.	Traffic Management	Anti-idling enforcement.	2021	2025	Bath and North East Somerset Council	Joint Air Quality Unit CAZ Clean Air Fund	No	Fully funded.	£10-£50k	Implementation	Not known	Number of signs erected.	Following on from some local trials, the 'Kick the Habit' campaign was developed and launched in 2022. Throughout 2023, we have engaged with all primary, infant, junior and secondary schools in the authority about the campaign. Thus far, the offer of printed resources as well as time to deliver in-school workshops has been taken up by 16 schools. In addition, we have engaged with local community groups with a remit that includes anti-idling, resident's associations and individual residents who have reported idling issues to us directly.	EXPECTED LOW EFFECTIVENESS. Difficult to measure impact. Engine and vehicle technology increasingly automatically switches engines off. Practically difficult to enforce and an educative approach is favoured
BATH 7	Electric Vehicle Charging Infrastructure (EVI)	Promoting Low Emission Transport	EV charging	2014	2023	West of England Mayoral Combined Authority (MCA), OZEV, Revive Network, LEVI tender winning CPO.	Local Sustainable Transport Fund, Access Fund, OZEV GULW, ULEV Taxi Infrastructure and MCA Green Recovery Fund, DfT Local Electric Vehicle Infrastructure (LEVI) fund.	No	Fully funded	£1m - £10m	Implementation/ completed	Not known	Number of charging devices per 100k population (DfT metric), number of charge points, number of EVs registered, number of charger events, number of Revive network users	A growing number of charger sessions across the Revive West of England Network. 14 chargers were in place by the end of 2022 across Bath, Midsomer Norton and Radstock. By the end of 2023, under the GULW scheme, 5 further chargers will be installed. The MCA Green Recovery Fund plans to install 27 sites with 44 chargers as part of a 3-year project.	EXPECTED MEDIUM EFFECTIVENESS. GULW project delayed by rapid charger global supply chain problems. GRF funding release delayed by political discourse (MCA/BCC) and legal financial issues around Subsidy Control Act 2022.

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
BATH 16	B&NES Corporate Travel Plan	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes	2015	2020	Bath and North East Somerset Council	Council budget	No	Fully funded.	n/a	Implementation	Not known	Business mileage. Modal shift (e.g., number of employees transferred from private car to bike, walking or public transport bus)	The reduction in business miles has continued significantly from the baseline and 2019/20 (pre-covid). 2022/23 has seen an increase of 37% from 2021-22, however, this was predictable as both B&NES and the wider district recover. When comparing 23/24 to 22/23 there has however been a 6% reduction. In late 2022, B&NES reprocured their managed corporate pool car fleet of 11 low emission cars. For the financial year 2022/23, 86k miles were transferred from grey fleet miles.	MEDIUM EFFECTIVENESS. 1 car is ringfenced for the Peasedown communities HUB. New CTP in development for 2021-2024
BATH 17	Clean Air Schools Kit	Promoting Travel Alternatives	School Travel Plans / Other	2019	2025 (anticipated lifecycle)	Local Authority and Primary Schools	B&NES budget	No	Fully funded.	n/a	Implementation	Not known	School uptake numbers.	Launched in 2019 and being used by several schools, the toolkit was refreshed in 2022. The toolkit has been made available to all schools across B&NES and has been further promoted through the school's newsletter on a regular basis and Hub website, so it is easier to navigate.	LOW EFFECTIVENESS. Despite low immediate effect, a necessary component part of a suite of measures to nudge long term change.
BATH 19	Dott e-scooter and e-bike trial	Transport Planning and Infrastructure	Other	2023	2026	MCA; Bath and North East Somerset Council; and Dott	Future Mobility Fund	No	Partially funded	£1m - £10m	Implementation	N/A	Mobility as a Service & e-scooter technology uptake numbers	Originally a 12-month trial launched in October 2020, the PAYG scheme originally included 50 e-scooters that could be picked up from various locations across Bath. The e-scooter contract changed to TIER in September 2023 (now Dott), with there now being around 300 e-scooters and 150 e-bikes available in the Bath fleet. To date, there have been over 86,000 e-scooter rides and 34,000 e-bike rides. Recently introduced formalised parking with more planned later in 2024. Planned expansion of service to remainder of Bath and some areas of NE Somerset	EXPECTED MEDIUM EFFECTIVENESS. Experimental. Short-trip replacement only. Safety concerns and difficulty enforcing against use on pedestrian only footways. The use of privately-owned e-scooters on public land remains illegal. Expansion of the scheme is dependent on Bristol and South Gloucester operations and agreeing for B&NES to expand.

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
BATH 23	Liveable Neighbourhoods	Traffic Management	Re-prioritising road space away from cars	2020	tbc	West of England Mayoral Combined Authority (MCA) and Bath and North East Somerset Council	City Regional Sustainable Transport Scheme (CRSTS) and Bath and North East Somerset Council (Transport Improvement Programme & Council Capital Programme)	No	Fully funded	£1m - £10m	Planning/ implementation	tbc	Active travel count on road space and vehicular ATC and/or ANPR data	In 2021, B&NES prioritised the development of 15 Liveable Neighbourhoods and throughout 2022, worked collaboratively with communities to identify existing issues and gather people's ideas for measures that could bring improvements to their area. 3 trial through-traffic restrictions were introduced in November 2022 and have now been made permanent. In 2023, 7 residents parking zones were introduced in addition to ongoing monitoring of the Liveable Neighbourhood trial schemes. One further trial through traffic restriction has been introduced on Sydney Place with further measures planned for the Lower Lansdown area and Lyme Road/Charmouth Road in 2024. The Full Business Case for the remainder of the LN programme will be submitted to MCA in September 2024. Monitoring data will be published via the Council's webpages.	EXPECTED MEDIUM EFFECTIVENESS Possible improvements in residential streets with potential worsening on main routes, although data so far is not showing any significant negative impacts.
BATH 26	Supplementary Planning Document	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2024	2026	Bath and North East Somerset Council	B&NES budget	No	Not funded	<10k	Planning	tbc	tbc		
BATH 27	Bath City Centre Sustainable Transport Corridor	Traffic Management	Re-prioritising road space away from cars	2023	2030	West of England Mayoral Combined Authority (MCA) and Bath and North East Somerset Council	City Regional Sustainable Transport Scheme (CRSTS) and Bath and North East Somerset Council (Transport Improvement Programme & Council Capital Programme)	No	Fully funded.	£1m - £10m	Planning	tbc	tbc	This project is split into 2 phases, the final business case is being developed for phase 1 and the outline business case for phase 2.	
BATH 28	Scholar's Way Active Travel Route	Transport Planning and Infrastructure	Other	2024	2026	Bath and North East Somerset Council	CAZ reinvestment reserve	No	Fully funded.	£1m - £10m	Planning	tbc	tbc		

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
BATH 29	School Streets	Traffic Management	Other	2024	2026	Bath and North East Somerset Council	CAZ reinvestment reserve	No	Fully funded	£100k-£500k	Planning	tbc	tbc		Recently contacted all schools in B&NES to request expressions of interest. Schemes will be monitored to understand the impact of traffic, active travel and air quality.
BATH 30	Smoke Control Area Review	Promoting Low Emission Plant	Other policy	2025	2026	Bath and North East Somerset Council	B&NES budget	No	Not funded	<10k	Planning	tbc	tbc		
BATH 31	Council corporate renewables and decarbonisation	Promoting Low Emission Plant	Other policy	2024	2030	Bath and North East Somerset Council	tbc	No	tbc	tbc	Implementation	tbc	tbc	1.67MW installed of a potential rooftop capacity of c.2.5MW and 2 care homes removed gas boilers and replaced with Air Source Heat Pumps – reduces local NOx emissions. Same template to be followed for Council corporate buildings.	Council corporate renewables and decarbonisation including installation of rooftop solar and heat pumps to enable reduction in carbon dioxide emissions and NOx emissions locally
BATH 32	Domestic and business retrofitting projects	Promoting Low Emission Plant	Other policy	2024	2030	Bath and North East Somerset Council and MCA	tbc	No	tbc	tbc	Implementation	tbc	No of properties with solar panels or heat pumps or new insulation	Currently in the installation phase of 2 nd round of solar together installations, with over 700 registrations. 70 applications for Home upgrade grant.	Domestic and business retrofitting projects relating to increasing uptake of rooftop solar; heat pump installation and energy efficiency measures
BATH 33	Awareness raising commercial vans	Promoting travel alternatives	other	2025	2030	Bath and North East Somerset Council	tbc	No	Not funded	tbc	Planning	Not known	tbc		
BATH 34	Clean Air Schools Kit – secondary schools	Promoting Travel Alternatives	School Travel Plans / Other	2019	2025 (anticipated lifecycle)	Local Authority and Secondary Schools	B&NES budget	No	Not funded	<10k	Planning	Not known	School uptake numbers.		
BATH 35	Bristol to Bath Bus corridor	Traffic Management	Re-prioritising road space away from cars	2023	2030	West of England Mayoral Combined Authority (MCA) and Bath and North East Somerset Council	City Regional Sustainable Transport Scheme (CRSTS) and Bath and North East Somerset Council (Transport Improvement Programme & Council Capital Programme)	No	Fully funded	tbc	Planning	N/A	tbc		

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
BATH 36	Bath Sustainable Walking and Cycling Links	Traffic Management	Re-prioritising road space away from cars	2026	2026	MCA B&NES	CRSTS	No	Fully funded.	tbc	Planning	NA	tbc	Outline design	Timeframes of CRSTS – must be delivered by March 2027
BATH 37	Bath Quays Links	Traffic Management	Re-prioritising road space away from cars	2026	2026	MCA B&NES	CRSTS	No	Fully funded.	tbc	Planning	NA	tbc	Detailed design	Timeframes of CRSTS – must be delivered by March 2027

Appendix A: Response to Consultation

This section will be completed once the consultation has been completed.

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

Consultee	Category	Response

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)
Alternatives to private vehicle use	Park and ride sites and car clubs	A number of park and ride sites already exist in Bath and there are some existing car clubs. No further actions are planned in this area.
Environmental Permits		The activities for the environmental permits issued in Bath are not a large source of NO ₂ .
Freight and delivery management	Freight consolidation centre and last mile delivery	Some actions have previously been trialled (see Table C.1), with lack of uptake they have been aborted.
Public information	Promotional website	Table C.1 shows actions which have previously been completed in the area. The information on the website continues to be updated.

Appendix C: Actions from previous Action Plans and Clean Air Plan which have been completed

Table C.1 – Measures from previous Action Plans and the Clean Air Plan which have been completed

Action No.	Estimated/Actual Completion Data	Measure Status	Progress to Date	Comments/barriers to implementation
Action 1: Bath Transport Package	Substantially complete.	Completed.	<p>890 additional P&R spaces between 2012 and 2015. Patronage at the 3 P&R sites overall grew by 16% between 2008/09-2016/17.</p> <p>4 EV charging sockets installed at each P&R site.</p> <p>Bus infrastructure works included: Raised pavements at 375 stops to ease access on and off buses; 169 Real Time Passenger Information displays; Replacement of existing shelters and the addition of new bus shelters. There are live VMS, 7 on the edge of the city and 6 in the City Centre for parking info and P&R promotion.</p> <p>Extension of 10am to 6pm traffic restrictions in Stall Street and Lower Borough Walls. Seven Dials shared space and cycle scheme. Closure of Saw Close car park (22 spaces).</p>	

Action No.	Estimated/Actual Completion Data	Measure Status	Progress to Date	Comments/barriers to implementation
Action 2: Cleveland Bridge Area Restrictions Feasibility Study	2022	Implementation/ Completed.	<p>Cleveland Bridge repairs started in June 2021, with the condition of the bridge being much worse than previously identified. Traffic signal shuttle working with width restriction remained in place until October 2022. The bridge fully reopened in October 2022 subject to an 18-tonne weight restriction. This remains in place into 2024. The condition of the bridge is being monitored, the results of which will determine a review of the associated 18-tonne weight restriction. Air quality at locations within the vicinity of the bridge will continue to be monitored as traffic volumes return to normal.</p>	2020 works were delayed due to Covid-19.
Action 3: Low Carbon Buses Trial	Complete.	Complete.	Complete. As a result, 8 hybrid electric buses were in operation for 10 years on park and ride services. Now superseded by Bath CAP 3 identified in Table 2.2 (CAZ Retrofitting).	39% improved fuel economy (mpg). 28% fuel saving (l/100km). Overall operating cost increase of £0.03/km (but due in part to prototype status). NO _x comparison unavailable. ORIGINAL MEASURE COMPLETE BUT NEW DEVELOPMENTS RE CAZ FUNDED RETROFITTING

Action No.	Estimated/Actual Completion Data	Measure Status	Progress to Date	Comments/barriers to implementation
Action 4: Urban Freight Transhipment	Complete (funding ceased).	Aborted.	See Bath CAP 5 and Bath 18 of Table 2.2 in the ASR: E-Cargo Bike last-mile delivery service funding was provided in 2019. Pilot scheme to subsidise delivery costs for businesses.	High level of subsidy required and no funding available – replaced with new E-cargo bike last-mile delivery (see 'Bath 18')
Action 5: Improved Enforcement of Traffic Regulation Orders	Complete.	Completed.	See Bath CAP 7	The trial indicated that identifying breaches of the 7.5 tonne weight limit and informally contacting the relevant operators led to a reduction in HGV volumes. For details see 2016 ASR.
Action 6: Bicycle Hire including Electric bikes	2018	Complete/ Aborted.	Action replaced with BATH 19. New cycle hire facility launched 2014 with PAYG at 9 stations across Bath. 5 further hire stations added to total 14 in 2016. Contract expired in 2019 and a new electric cycle hire scheme was tendered in 2019 but no contract was awarded. The focus has now shifted to an e-scooter trial.	Over 15,000 hires between June 2014 and June 2016. 877 users per month. Electric cycle hire scheme was tendered in 2019. Original hire scheme cancelled because non-profitable. an e-bikes more suitable. Action replaced with BATH 19.
Action 8: Improve Building Emission Assessments	n/a	Aborted.	No progress	Lack of resource and low priority due to low %age source apportionment.
Action 9: ECOSTars Vehicle Recognition Scheme	n/a	Aborted.	No progress	Low priority due to limited reported effectiveness and lack of resource.

Action No.	Estimated/Actual Completion Data	Measure Status	Progress to Date	Comments/barriers to implementation
Action 10: Review council and emergency service vehicle fleet	2021	Implementation/ Completed.	Review undertaken by Energy Saving Trust for successful GULW Bid. The Council pledged to change 25% of light duty fleet to ULEVs by 2021. At the beginning of 2024, 50% of the light duty fleet (45 vehicles) are electric. Additionally, all large lorries that are a part of the fleet are Euro 6 or meet equivalent standards. An additional 4 electric hire pool cars and are 1 hybrid vehicle are also being used within B&NES.	MoU signed by emergency services as a roadmap for meeting Euro 6 compliance for all but cars by 2021. Council fleet also compliant. Action replaced with Bath 16.
Action 11: Monitoring of bus fleet quality	2021	Completed.	Superseded by Bath CAP3. OLEV Low Emission Bus Scheme bid unsuccessful. Pre-CVRAS Clean Bus Technology Fund relatively ineffective with some retrofitting unable to meet certification requirements. The Clean Air Fund bid as part of the CAP and CBTF extension means that theoretically all public bus services will be upgraded to CVRAS Euro VI by the end of 2020. Additionally, WECA will ensure that as part of its local bus service contract, Euro 6 buses are used on all contracted routes by 31 st December 2023. See 'Bath CAP 3.	Superseded by Bath CAP3. Full audit of fleet planned as part of CAZ proposals. Bus upgrade programme agreed with operators most retrofits completed at time of writing.
Action 12: Transport and travel information	Complete.	Completed.	248 real time bus passenger information displays installed across B&NES. Overall bus passenger satisfaction in 2016 stood at 41% very satisfied and 47% satisfied, in 2016.	Bus checker app implemented as part of LSTF West of England project and available via the Travel West website .

Action No.	Estimated/Actual Completion Data	Measure Status	Progress to Date	Comments/barriers to implementation
Action 13: Alternative Exhaust Emissions Abatement	November 2020	Completed.	Superseded by BATH CAP 3. Clean Bus Technology Fund used for retrofitting of 35 buses across the West of England to Euro 5/6. Also, Clean Vehicle Technology Fund award (joint bid) enabled Thermal Management Technology (TMT) to 42 buses across the West of England fitted as standard with Selective Catalytic Reduction (SCR). CAP CAF bid for 117 fully funded vehicle retrofits, 13 repowers and 26 CBTF Extension funded retrofits.	Availability of CVRAS (Clean Vehicle Retrofit Accreditation Scheme) accredited retrofit solutions.
Action 14: Rossiter Road and Widcombe Parade traffic management measures	Completed.	Completed.	Completed 2015 and annual mean NO ₂ levels reduced from 49 in 2014 to 28 µg/m ³ in 2016 on Widcombe Parade.	
Action 15: Promotional website	2022.	Completed.	Power BI visualisation with an interactive map showing annual data from 2014 to 2022 remains operational. A live feed from the automatic analyser sites is available to view on the UK-AIR website. The locations of the analysers can be viewed on an interactive map, where data is also available to download.	

Action No.	Estimated/Actual Completion Data	Measure Status	Progress to Date	Comments/barriers to implementation
Action 18: e-cargo and ULEV delivery scheme	2025	Aborted	In February 2021 the revised bid was approved resulting in £500,000 to begin the project. Existing pilot terminated in January 2022, enabling the subsidised delivery trial to commence. Measure now taken forward as 'BATH CAP 5' above, however, this was aborted in 2022 due to low uptake.	Real focus on e-cargo delivery in terms of funding. To subsidise delivery to discourage regular courier. Big impact for some businesses.
Action 21: Public Realm and Movement	2021	Completed	Experimental access restrictions in Kingsmead Square, stopping motor vehicles between 11am and midnight, were in place throughout 2022. Following a public consultation, this Experimental Traffic Regulation Order was made permanent in 2023.	
Action 22: Clean Air Day	Ongoing	Aborted	This was aborted in 2020 due to Covid-19 lockdown	Impossible to measure effectiveness.
Action 24: Electric-Brompton hire scheme		Aborted	Aborted	

Action No.	Estimated/Actual Completion Data	Measure Status	Progress to Date	Comments/barriers to implementation
Action 25: Milsom St access restrictions	2021	Completed	Milsom Street was under an experimental traffic order from July 2020 that saw only buses being allowed to use the road from the junction of George Street and Quiet Street between 10am and 6pm. Restrictions were introduced as part of various measures across Bath to help with social distancing, whilst keeping pedestrians and cyclists safe in the city. Following a consultation, this experimental TRO was made permanent in 2023 to the support the use of public transport.	
Action CAP 1: Reduced residents parking permit charges for ULEVs	2022	Completed	As planned, this trial scheme ended in March 2022. Overall uptake was low, with 43 permits issued within the 2021/2022 financial year. A discount of 50% for resident on street permits for EV vehicles only as part of our emissions-based charges.	Uptake and affordability of ULEVs.
Action CAP 3: Retrofitting buses	2022	Completed	Completed in June 2022, with all 88 vehicles successfully retrofitted.	
Action CAP 4: Financial Assistance Scheme	2021	Completed	947 vehicles upgraded by the end of December 2023 (22 buses/coaches, 2 minibuses, 32 HGVs, 781 LGVs and 110 taxis/PHVs). This scheme is now complete with all funding allocated.	Economic conditions and business solvency. Private vehicle and campervans difficult to replace and often low number of journeys in zone to justify change.

Action No.	Estimated/Actual Completion Data	Measure Status	Progress to Date	Comments/barriers to implementation
Action CAP 5: E-cargo bike distribution measure. Previously known as: 'Support and facilities for alternative delivery and servicing options for businesses'	2022	Aborted	Scheme was aborted due to low uptake rates; the courier delivery market remains competitive and evolving. Other E-cargo projects are planned locally and are to be delivered by WECA	Delivery and Service Plans aborted and replaced with only/last mile.
Action CAP 6: Sustainable Travel and Transport Team	2025	Completed	Approximately 2000 people spoken to by the end of December 2022, with an additional 100 online questionnaires completed for the second phase of the Financial Assistance Scheme (FAS). The FAS has now closed with all funding allocated.	. Difficult to measure impact. Not as important as Bath CAP 4.
Action CAP 9: Queen Square Urban Traffic Management Control	-	Completed	The UTMC at Gay Street was reinstated following the full reopening of Cleveland Bridge in October 2022. Throughout 2023, concentrations of NO ₂ did not exceed the objective.	Part and full closure of Cleveland Bridge has impacted the operation.

Glossary of Terms

Abbreviation	Description
AQ	Air Quality
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
AURN	Automatic Urban and Rural Network
B&NES	Bath and North East Somerset Council
CAP	Clean Air Plan
CAZ	Clean Air Zone
CRSTS	City Regional Sustainable Transport Scheme
CTP	Corporate Travel Plan
Defra	Department for Environment, Food and Rural Affairs
EV	Electric Vehicle
EU	European Union
FAS	Financial Assistance Scheme
GUL	Go Ultra Low
JAQU	Joint Air Quality Unit
JNZ	Journey to Net Zero
KPI	Key Performance indicator
LAQM	Local Air Quality Management
LCWIP	Local Cycling and Walking Infrastructure Plan
LN	Liveable Neighbourhood

MaaS	Mobility as a Service
MCA	West of England Mayoral Combined Authority
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
OZEV	Office for Zero Emission Vehicles
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
PAYG	Pay as you go
TG22	Technical Guidance (Local Air Quality Management)
µg/m ³	Micrograms per cubic metre
ULEV	Ultra-Low Emission Vehicles
UTMC	Urban Traffic Management Control
WECA	West of England Combined Authority

References

- Bath Air Quality Action Plan, 2011 Published by Bath & North East Somerset Council.
http://www.bathnes.gov.uk/sites/default/files/20110303_final_bath_air_quality_action_plan.pdf
- Air Quality Action Plan for Temple Cloud and Farrington Gurney, 2023. Published by Bath and North East Somerset Council
<https://beta.bathnes.gov.uk/sites/default/files/Farrington-Gurney-and-Temple-Cloud-Air-Quality-Action-Plans-2023.pdf>
- Environmental equity, air quality, socioeconomic status and respiratory health, 2010
- Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006 Published by Defra
- Defra. Abatement cost guidance for valuing changes in air quality, May 2013
- UK Health Security Agency. Chemical Hazards and Poisons Report, Issue 28, 2022.
- Defra. Abatement cost guidance for valuing changes in air quality, May 2013
- Bath & North East Somerset Council Corporate Strategy
<https://beta.bathnes.gov.uk/document-and-policy-library/corporate-strategy-2023-2027>
- [Bath & North East Somerset Council Journey to Net Zero - https://beta.bathnes.gov.uk/journey-net-zero](https://beta.bathnes.gov.uk/journey-net-zero)
- Bath & North East Somerset Council Air Quality Annual Status Report 2023, July 2023. Published by Bath and North East Somerset
https://beta.bathnes.gov.uk/sites/default/files/Final_annual_air_quality_bnes_2023.pdf
- Clean Air Plan: Full Business Case, 2020. Published by Bath & North East Somerset Council. <https://www.bathnes.gov.uk/bath-breathes-2021-overview/full-business-case>

- Bath & North East Somerset Council Liveable Neighbourhoods Consultation
<https://beta.bathnes.gov.uk/liveable-neighbourhoods-public-engagement-nov-2021/introduction-and-policy-background>
- Transport Delivery Action Plan for Bath – Phase 1, Current and Future Report, April 2020. Published by Bath & North East Somerset Council
<https://beta.bathnes.gov.uk/sites/default/files/Bath%20Report%20Aug%202020%20-%20Final%20edited.pdf>
- West of England Local Cycling and Walking Infrastructure Plan
<https://travelwest.info/projects/west-of-england-local-cycling-and-walking-infrastructure-plan>
- Clean Air Schools Toolkit, 2019. Published by Bath & North East Somerset Council <http://thehub.bathnes.gov.uk/Page/11243#>
- Bath & North East Somerset Council Air Quality Data – Live Website,
<https://www.bathnes.gov.uk/services/environment/pollution-noise-nuisance/air-quality/live-air-quality-data>
- UK Air website <https://uk-air.defra.gov.uk/>
- Bath & North East Somerset Council Air Quality Data – Long Term Website,
<https://www.bathnes.gov.uk/services/environment/pollution-noise-nuisance/air-quality/air-quality-data-long-term>
- Travelwest Website - <https://travelwest.info/>
- Local Air Quality Management Technical Guidance LAQM.TG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Local Air Quality Management Policy Guidance LAQM.PG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
- Environment Act 1995.
- Environment Act 2021.
- Air Quality Strategy – Framework for Local Authority Delivery. August 2023. Published by Defra.

- National Planning Policy Framework December 2023
https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NP_PF_December_2023.pdf
- Bath and North East Somerset Council, 2019. Declaring a Climate Emergency.
- Bath and North East Somerset Council, 2023. Climate Emergency Strategy.
- Bath and North East Somerset Council, 2023. Ecological Emergency Action Plan.
- Bath and North East Somerset Council, 2023. New Policy NE3a Biodiversity Net Gain.
- Bath & North East Somerset Council Development Plan
<https://beta.bathnes.gov.uk/policy-and-documents-library/development-plan-core-strategy-placemaking-plan-and-local-plan-partial>
- West of England Combined Authority – City Regional Sustainable Transport Settlement <https://www.westofengland-ca.gov.uk/wp-content/uploads/2021/10/West-of-England-Combined-Authority-CRSTS.pdf>
- West of England Combined Authority – Joint Local Transport Plan 2 2020-2036 <https://www.westofengland-ca.gov.uk/wp-content/uploads/2021/10/JLTP4-Adopted-Joint-Local-Transport-Plan-4.pdf>
- Bath and North East Somerset Council Joint Health and Wellbeing Strategy
- Emission Factor Toolkit - <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/emissions-factors-toolkit/>