



East Staffordshire Borough Council

Air Quality Action Plan

In fulfilment of Part IV of the Environment Act 1995

Local Air Quality Management

September 2024

East Staffordshire Borough Council

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Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management (LAQM) framework. It outlines the action we will take to improve air quality in East Staffordshire between 2024 and 2029. This updated AQAP has already been approved both internally and by Defra.

This AQAP replaces the previous action plan which ran from 2015-2020 and is a supplementary document to the updated Air Quality Strategy (2024-2029) which sets out the overarching framework through which we will manage air quality in the borough.

Some key projects delivered through the past action plan include:

- Various measures implemented through the Integrated Transport Strategy for East Staffordshire including;
 - Two bus realignment schemes on Borough Road and New Street in 2016-17.
 - Completion of new cycle routes NCN63 along Station Street, Burton in 2023 and improved cycle links across the A5189/A444 corridor to Swadlincote.
 - Burton railway station forecourt improvements with enhanced pedestrian routes, disabled parking, prioritised access for taxis and segregated bus lane/shelters on either side of the main carriageway completed in 2020.
 - Real Time Bus Passenger Information (RTPI) and infrastructure improvements rolled out across Burton between 2018 and 2020 including promotion of the RTPI on the My Staffs App.
 - Burton Town Centre Regeneration Project to help improve traffic flow through Burton.
- Eco-Stars fleet recognition scheme covering over 60 members (approximately 4278 vehicles) across Staffordshire between 2016 and 2018.

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- Development of informal air quality planning guidance for developers from 2016 onwards.
- Utilisation of the Defra Damage Cost assessment approach for a select few developments to place a value on the impact on air quality and in turn to determine the required amount required to be spent on mitigation through S.106 agreements.
- Upgrade to the automatic monitoring station at Derby Turn in 2021 to ensure its future retention and reliability and regular reviews of the diffusion tube network to ensure monitoring was appropriate, cost effective and took account of any changes in air quality outside of the AQMAs.
- Installation of a National Automatic Urban and Rural Network (AURN) monitoring station in the Eton ward of Burton that has monitored nitrogen dioxide (NO₂) since 2018 and particulates PM₁₀ / PM_{2.5} from 1st July 2022. The station is managed by Bureau Veritas on behalf of Defra.
- Partnership working with Public Health and Staffordshire County Council in promoting walking and cycling and low emission transport including supporting initiatives such as the Clean Air Day and provision of public information. Also the development of the Air Aware project for schools engagement from 2019 funded through two successful Defra Air quality grants which is ongoing to this day.

Over the time period since the publication of the last AQAP, air quality has improved across all monitoring locations within the East Staffordshire Borough. Within AQMA 1 the highest NO₂ concentrations have historically been recorded on Derby Street on the approach to Derby Turn and Wellington Street. However, for years 2020-2022, NO₂ concentrations at relevant receptors have consistently been below the 40µg/m³ annual mean objective. For AQMA 2 at St Peters Bridge roundabout in Stapenhill, NO₂ concentrations have been consistently below the annual mean NO₂ objective at relevant receptors for over 5 years. East Staffordshire Borough Council is now in the process of formally revoking AQMA 2. Defra feedback in October 2023 supports our intention to revoke AQMA 2. The picture for AQMA 1 is less clear. Compliance being reached in 2020 and 2021 in particular may not necessarily be representative of long term trends in pollutant concentrations due to observed changes in travel behaviours

associated with the Covid-19 pandemic. Also some locations within AQMA 1 are still recording levels of NO₂ that are 10% below the annual mean Objective (i.e. above 36µgm³). To account for the inherent uncertainty with the use of diffusion tubes, revocation should only be considered where there are 3 consecutive years of annual mean NO₂ concentrations below 36µgm³. Therefore, AQMA 1 is still relevant and requires an updated AQAP. In order to be proportionate, this AQAP focuses on measures that can be implemented within the next few years that will work towards reducing NO₂ concentrations below 36 µgm³.

We already know road traffic is the main source of NO₂ in our AQMA, but a simple source apportionment exercise has confirmed that diesel cars and diesel LGVs contribute most to roadside NO₂ by vehicle type.

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^{1,2}.

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion³. East Staffordshire Borough Council is committed to reducing the exposure of people in East Staffordshire to poor air quality in order to improve health.

Actions have been developed that primarily addresses NO₂ within AQMA 1, but also addresses more strategic issues to try and reduce emissions of NO₂, PM_{2.5} and carbon dioxide (CO₂) across the borough in order to improve human health and the environment in a more equitable way. The measures can be considered under eight broad topics:

1 Environmental equity, air quality, socioeconomic status and respiratory health, 2010

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

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

- Alternatives to private vehicle use
- Policy guidance and development control
- Promoting low emission transport
- Promoting travel alternatives
- Public information
- Transport planning and infrastructure
- Traffic management
- Environmental permits

Our key priorities are;-

- To reduce NO₂ concentrations even further within AQMA 1 to below 36µg/m³ through various supporting transport measures and enable revocation within the next few years.
- To reduce emissions from development and regeneration through the formal adoption of a Supplementary Planning Document (SPD) for air quality.
- To lead by example by reducing our own emissions and develop more internal/external working groups and ensure integration with Council decision making and policies.
- To raise awareness of air quality issues and provide information and guidance to members, businesses and residents as to how they can protect themselves and be part of the solution through behaviour change.
- To work towards reducing PM_{2.5} emissions across the borough.

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 East Staffordshire Borough Council's direct influence.

Responsibilities and Commitment

This AQAP was prepared by the Environmental Health Department of East Staffordshire Borough Council with the support and agreement of the following officers and departments:

- Rachel Liddle – Environmental Health Manager, Environmental Health, East Staffordshire Borough Council
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- Naomi Perry – Planning Manager, Development Control, East Staffordshire Borough Council
- Kelly Kerr-Delworth – Enterprise Manager, Enterprise, East Staffordshire Borough Council
- Paul Farrer – Environment Manager, Environment, East Staffordshire Borough Council
- Kay Buck – Waste Support Officer, Waste Management, Enterprise, East Staffordshire Borough Council
- Annabel Chell – Head of Connectivity & Sustainability, Staffordshire County Council
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- Ryan Proctor – School Travel Advisor, Connectivity Support Team, Staffordshire County Council
- Mike Calverley – Health Protection and EPR Lead, Public Health and Prevention – Health and Care Directorate, Staffordshire County Council

This AQAP has been approved by:

- Internal corporate management team (CMT)
- Cabinet members
- Leaders of the Council and Leaders of the opposition.

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This AQAP has not yet been signed off by a Director of Public Health, but will now go through an external consultation process.

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

If you have any comments on this AQAP please send them to Craig Morris and Martyn Manning at:

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1 Introduction

This report outlines the actions that East Staffordshire Borough Council aim to deliver between 2024-2029 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 borough of East Staffordshire.

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 East Staffordshire Borough Council's air quality status reports (ASR). It is also a supplement document to the Councils' revised Air Quality Strategy for East Staffordshire (2024-2029) which sets out the overarching framework through which we manage air quality in the borough.

2 Summary of Current Air Quality in East Staffordshire Borough

2.1 Location and Context

The borough of East Staffordshire occupies a strategic position on the edge of the West Midlands sharing borders with South Derbyshire and Derbyshire Dales in the East Midlands. The borough covers an area of approximately 150 square miles. Census⁴ 2021 data shows in East Staffordshire, the population size has increased by 9.2%, from around 113,600 in 2011 to 124,000 in 2021. This percentage population increase is higher than the overall increase for the West Midlands Region (6.2%) and England as a whole (6.6%). Since 2011, there has also been an increase of 20.7% in people aged 65 years and over, an increase of 6.5% in people aged 15 to 64 years, and an increase of 9.1% in children aged under 15 years.

East Staffordshire is predominantly rural. The two main towns are Burton upon Trent and Uttoxeter. Almost three quarters of the Borough population (72.9%) reside in Burton upon Trent (76,300) and Uttoxeter (14,000), despite these two towns comprising just 12% of the total land area of the Borough⁵. Burton upon Trent is the principal town where the bulk of employment for the Borough is provided and is a sub-regional centre serving the needs of its hinterland. Meanwhile, Uttoxeter is a small traditional market town with a sphere of influence extending into Derbyshire Dales and Staffordshire Moorlands.

4 East Staffordshire population change, Census 2021 – ONS
<https://www.ons.gov.uk/visualisations/censuspopulationchange/E07000193/>

5 Build a custom area profile (Burton upon Trent & Uttoxeter), Census 2021 – ONS
<https://www.ons.gov.uk/visualisations/customprofiles/build/>

There are no motorways in the Borough, although there are two major trunk routes, namely:

- A38 between Birmingham and Derby
- A50 linking the M1 near Nottingham and the M6 at Stoke on Trent

The main commuter routes into Burton from Leicestershire, Warwickshire, Derbyshire and other parts of Staffordshire include;

- A511 linking the A50 to the north and the M1 near Coalville, Leicestershire
- A444 traversing the M42 and Nuneaton in North Warwickshire

2.2 Air Quality Management Areas and overview of monitoring network

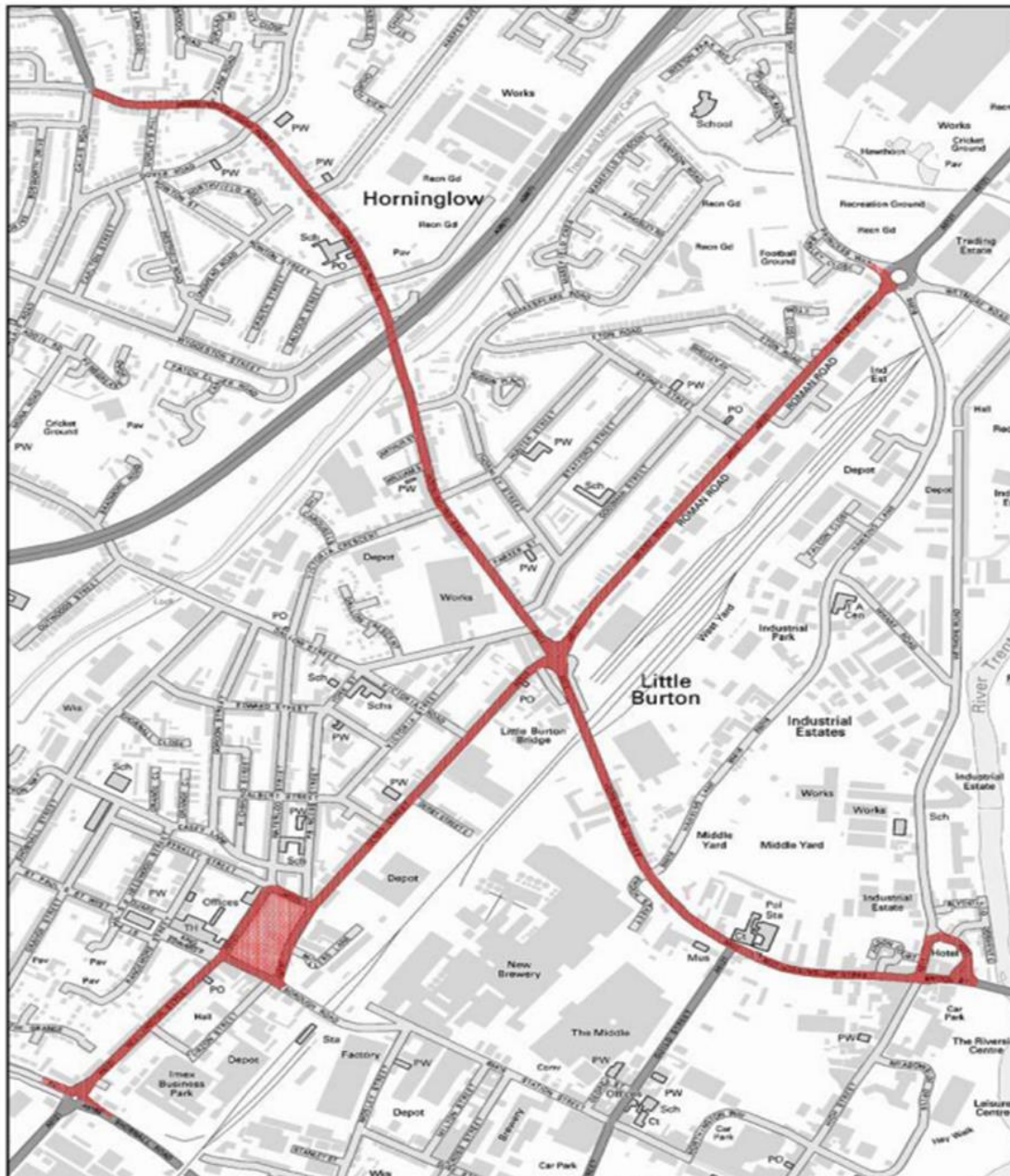
East Staffordshire Borough Council carries out monitoring of nitrogen dioxide (NO₂) using a network of diffusion tubes. East Staffordshire Borough Council also historically monitored NO₂ at an automatic monitoring station at Derby Turn.

Monitoring at this station ended in summer 2024 as the automatic monitor came to the end of its life. There are no immediate plans to install new monitors at this stage but Bureau Veritas manage an urban background monitoring station off Masefield Crescent (Horninglow, Burton upon Trent) on behalf of Defra. This station forms part of the automatic, urban, rural network (AURN), which is the UK's largest automatic monitoring network. AURN sites provide high resolution hourly information which is communicated rapidly to the public, using a wide range of electronic, media and web platforms. The Horninglow AURN site has monitored NO₂ since 2018 and PM₁₀ / PM_{2.5} from 1st July 2022. Although this is not a local authority station, data is available at <https://uk-air.defra.gov.uk/networks/>.

East Staffordshire Borough Council declared two Air Quality Management Areas (AQMAs) for exceedances of the annual mean NO₂ objective relating to road traffic emissions back in 2007. AQMA 1 is centred on Derby Turn, comprising of the A511 Horninglow Road/Horninglow Street, the A5121 Wellington Street/Derby Street and the Derby Street/Byrkley Street gyratory and A5121 Derby Road. AQMA 2 is much smaller and is centred on St Peters Bridge roundabout in Stapenhill. Both AQMAs

are shown in Figures 2.1 and 2.2 respectively and are also on the Defra website “List of Local Authorities with AQMAs”.⁶

Figure 2.1 – AQMA 1 Burton upon Trent



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6 List of Local Authorities with AQMAs <https://uk-air.defra.gov.uk/aqma/list>

Figure 2.2 – AQMA 2 Stapenhill



All of the monitoring sites within the AQMAs are shown in Figures C.1 to C.11 in Appendix C. Furthermore, Bureau Veritas manage an urban background monitoring station off Masefield Crescent (Eton area, Burton upon Trent) on behalf of Defra. This station forms part of the automatic, urban, rural network (AURN), which is the UK's largest automatic monitoring network. The Horninglow AURN site has monitored NO₂ since 2018 and PM₁₀/ PM_{2.5} from 1st July 2022. Although this is not a local authority station, data is available at <https://uk-air.defra.gov.uk/networks/>.

The following section presents monitoring data for each of the AQMAs with recommendations for East Staffordshire Borough Council for progressing the LAQM process for these AQMAs.

2.2.1 AQMA 1 – Burton upon Trent

Monitoring is carried out using diffusion tubes at twenty two locations within AQMA 1 as shown in Figures C.1 to C.10 in Appendix C.

The locations within AQMA 1 with the highest NO₂ concentrations are historically centred on the approach to Derby Turn and Wellington Street. When corrected for distance to take account of concentrations at relevant receptors, NO₂ concentrations have consistently been below the 40µg/m³ annual mean objective for the past four years with an overall downward trend that extends even further back. Figure 2.3 below shows the long term trend in NO₂ concentrations within AQMA 1 over the past six years. The six monitoring locations presented in Figure 2.3 represent relevant façade exposure locations (i.e. concentrations at the monitoring location itself have been distance corrected to derive the concentration at the relevant exposure) where the highest NO₂ concentrations have occurred historically within each link of AQMA 1.

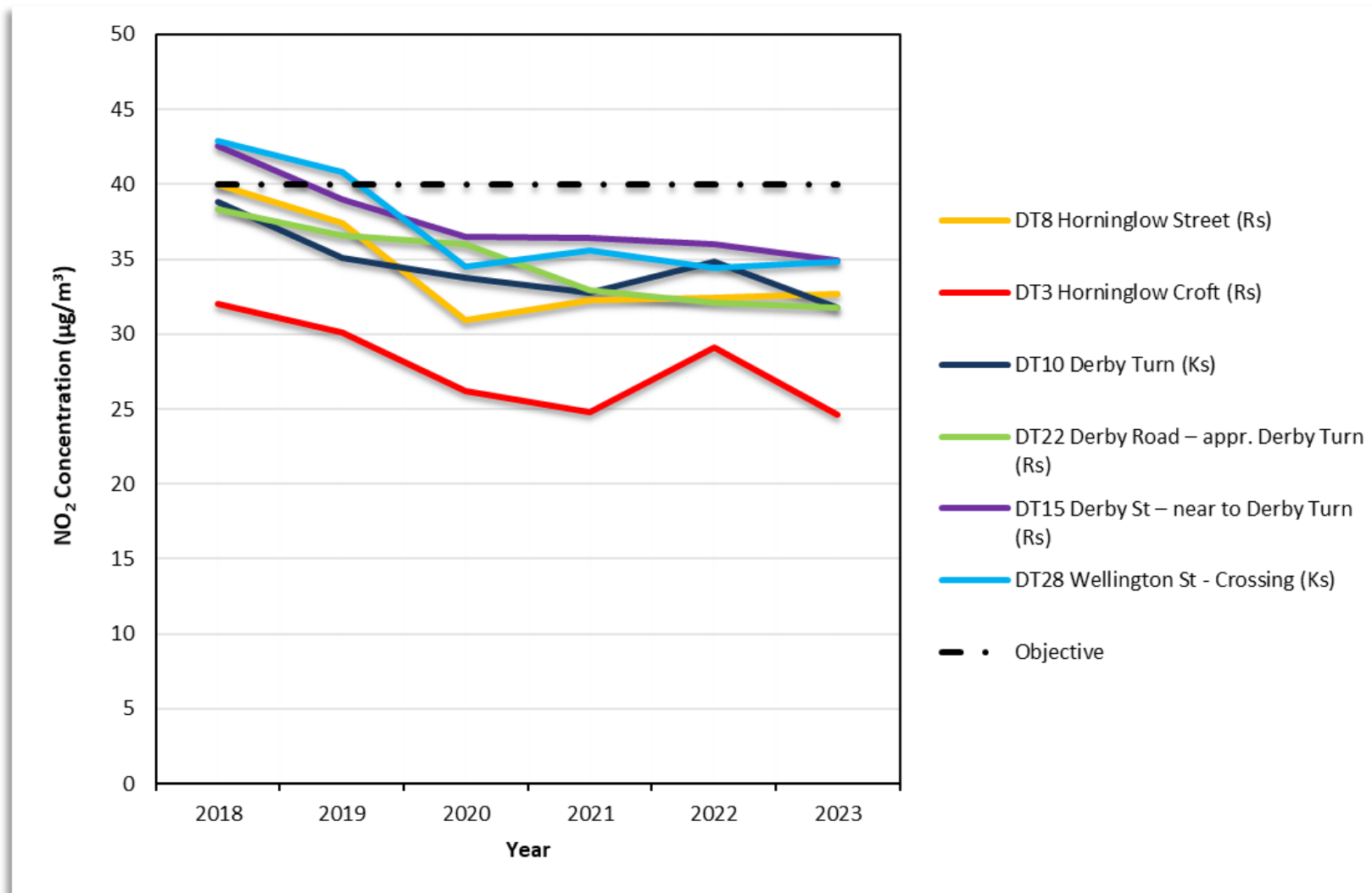
Some caution needs to be applied to this trend, however. Compliance being reached in 2020 and 2021 in particular may not necessarily be representative of long term trends in pollutant concentrations due to observed changes in traffic behaviours resulting from lockdown measures associated with the Covid-19 pandemic.

Furthermore, local authorities when considering whether to amend or revoke an AQMA, would need three consecutive years of annual mean NO₂ concentrations being lower than 36µg/m³ (i.e. within 10% of the annual mean NO₂ objective) when monitoring is undertaken using diffusion tubes, which is largely the case here in East Staffordshire for AQMA 1. Despite NO₂ concentrations being below 40µg/m³ for the past five years at the Derby Turn automatic monitoring station and dropping even lower to between 25.2µg/m³ and 32µg/m³ for the past four years, NO₂ concentrations have hovered around 36µg/m³ at three diffusion tube locations in AQMA 1 between 2020 and 2022. These diffusion tube locations are DT15 Derby Street on the approach to Derby Turn junction, DT10 Derby Turn kerbside and DT28 Wellington

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Street crossing as shown in Figure 2.3. However, during 2023 all locations when corrected for relevant receptors dropped below $36\mu\text{g}/\text{m}^3$ for the first time since the AQMA was declared back in 2007. These results show that it is too early to revoke AQMA 1, hence the rationale for this updated AQAP, which Defra supported in their feedback of an earlier draft version of this AQAP. Further measures as set out in this updated AQAP are required to maintain NO_2 concentrations at all monitoring locations at levels below $36\mu\text{g}/\text{m}^3$. It is hoped that within two to three years East Staffordshire Borough Council will be in a better position to make a decision on revoking AQMA 1 should this overall downward trajectory continue.

Figure 2.3 – Six year trend in Annual Mean NO₂ concentrations in AQMA 1 at relevant exposures



2.2.2 AQMA 2 - Stapenhill

Monitoring is carried out using diffusion tubes at two locations within AQMA 2 as shown in Figure C.11 in Appendix C.

The Defra LAQM Technical Guidance (TG22), August 2022 [LAQM-TG22-August-22-v1.0.pdf \(defra.gov.uk\)](https://www.defra.gov.uk/publications/default.aspx?id=5252) highlights that the revocation of an AQMA should be considered after 3 years of compliance with the relevant objective, evidenced by monitoring. This allows for the annual variation in meteorological conditions, which can affect air quality.

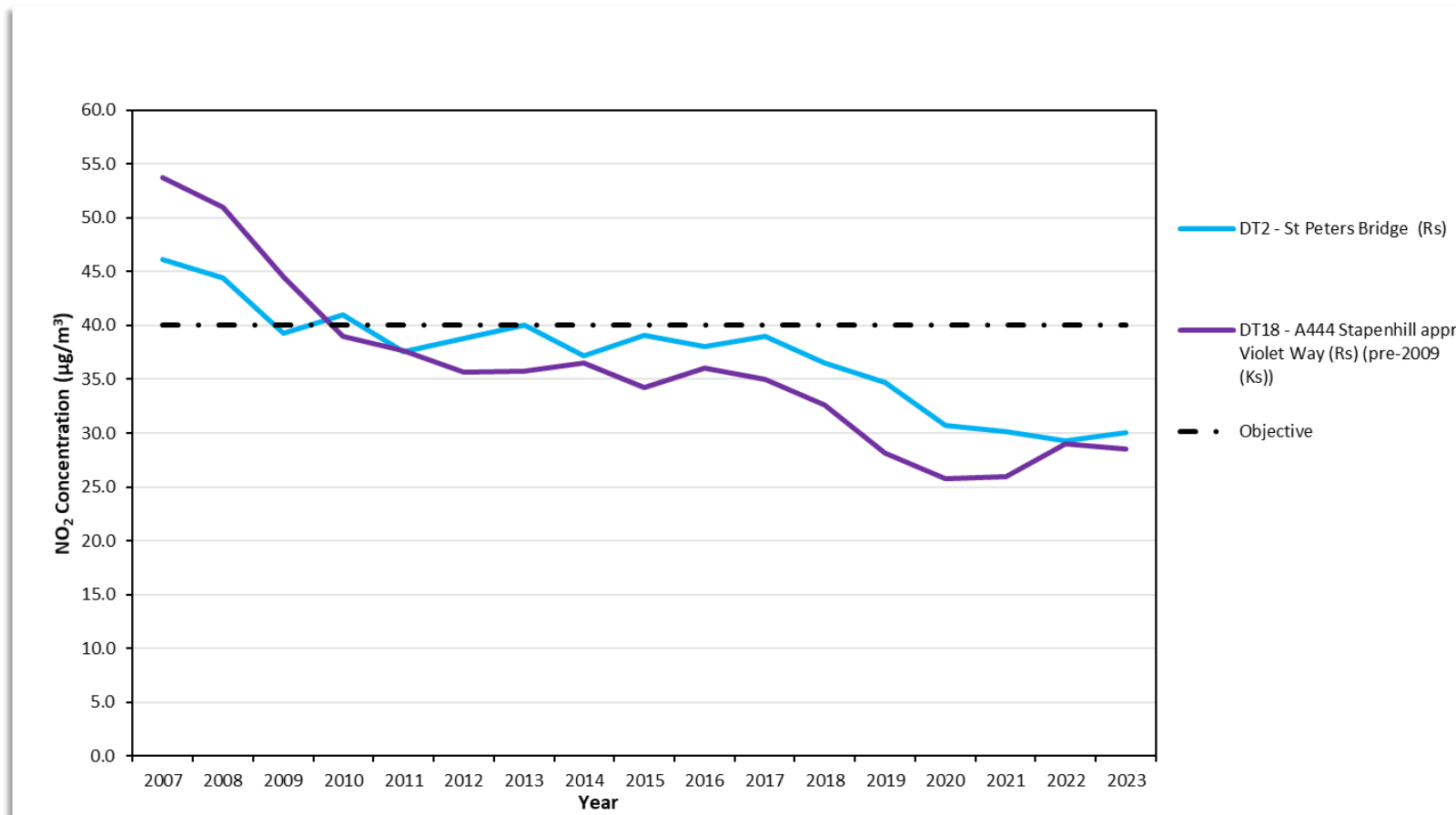
When relying on diffusion tube data, TG22 guidance recommends that to account for inherent uncertainty with the use of diffusion tubes, revocation should be considered where there are three consecutive years of annual mean NO₂ concentrations below 36µgm³ i.e. 10% below the relevant Objective (40µgm³). NO₂ concentrations have been below 36µgm³ since 2019 and given eleven years of the Objective not being exceeded, meteorological variation over the corresponding time doesn't appear to have significantly affected the air quality to any negative degree.

East Staffordshire Borough Council is in the process of formally 'revoking' AQMA 2, but will continue to monitor at the current locations however.

Defra feedback in October 2023 in relation to East Staffordshire Borough Council's 2023 ASR, supports our intention and the rationale for revoking AQMA 2.

Figure 2.4 below demonstrates this long term improvement in air quality within AQMA 2 dating back to 2007 to show the rationale behind revoking AQMA 2.

Figure 2.4 – Trends in Annual Mean NO₂ concentrations in AQMA 2 at relevant exposures (2007-2023)



3 East Staffordshire Borough Council's Air Quality Priorities

3.1 Public Health Context

Poor air quality represents the largest environmental risk to public health. The mortality burden of air pollution in England is estimated to be between 26,000 and 38,000 deaths per year.⁷ There is growing evidence of the impact of gaseous NO_x and particulate matter pollutants on respiratory and cardiac health from sources such as the Committee on the Medical Effects of Air Pollutants (2010) and the Royal College of Physicians and Royal College of Paediatrics and Child Health (2016)⁸. There is also emerging evidence for a link between air pollution and an accelerated decline in cognitive function leading to the onset of dementia.

Figure 3.1 below outlines the main sources of both NO_x and PM_{2.5} and their associated health impacts, for which PM_{2.5} has the greater potential to cause damage to health due to the smaller particle size. Within Staffordshire it is estimated that in 2021 (latest figures) (5.8% of all deaths can be attributed to exposure to PM_{2.5}, compared to 6.3% across England⁹. In East Staffordshire this figure was estimated to be 6.0% in 2021, which is below the national average but above the Staffordshire county average. Overall, the estimated cost to individuals and society is more than £20 billion annually for the UK.

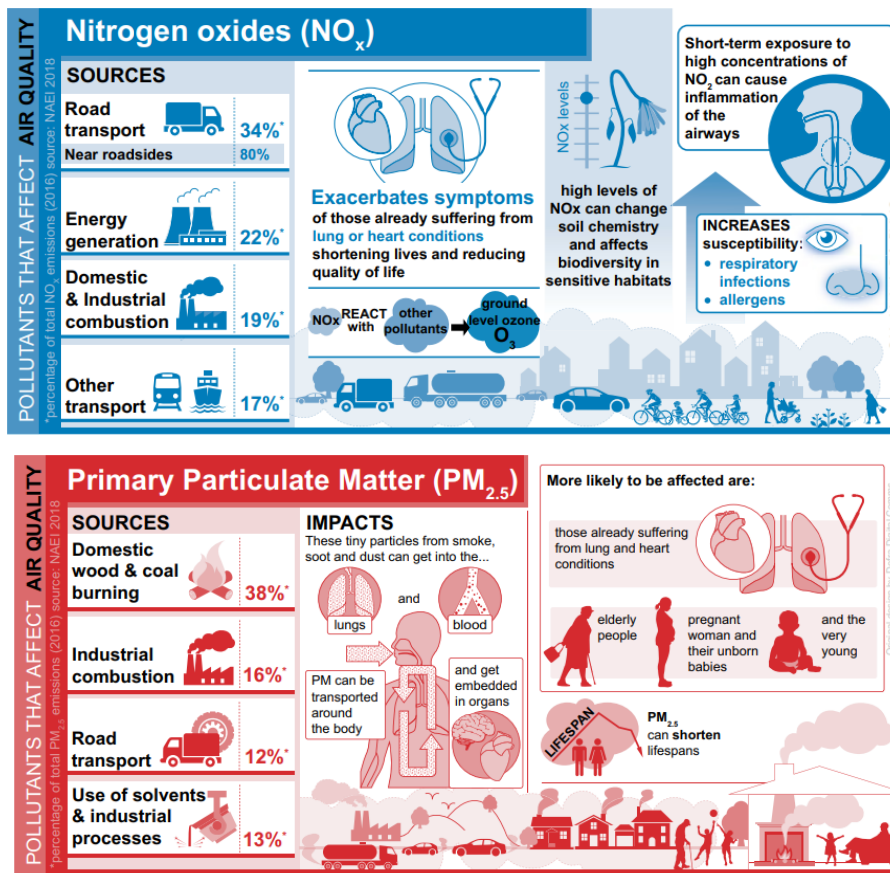
7 Chief Medical Officers Annual Report 2022 Air Pollution

<https://assets.publishing.service.gov.uk/media/6389ee858fa8f569f9c823d2/executive-summary-and-recommendations-air-pollution.pdf>

8 Every breath we take: the lifelong impact of air pollution <https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>

9 Public Health England. Public Health Outcomes Framework 5th May https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/3/gid/1000043/pat/6/par/E12000005/ati/102/are/E10000028/iid/30101/age/230/sex/4/cid/4/tbm/1/page-options/car-do-0_ine-vo-1:2019:-1:-1_ine-ct-2_ine-pt-0

Figure 3.1 – Air pollutants, sources and potential health impacts of NO_x and PM_{2.5} from the Clean Air Strategy 2019¹⁰

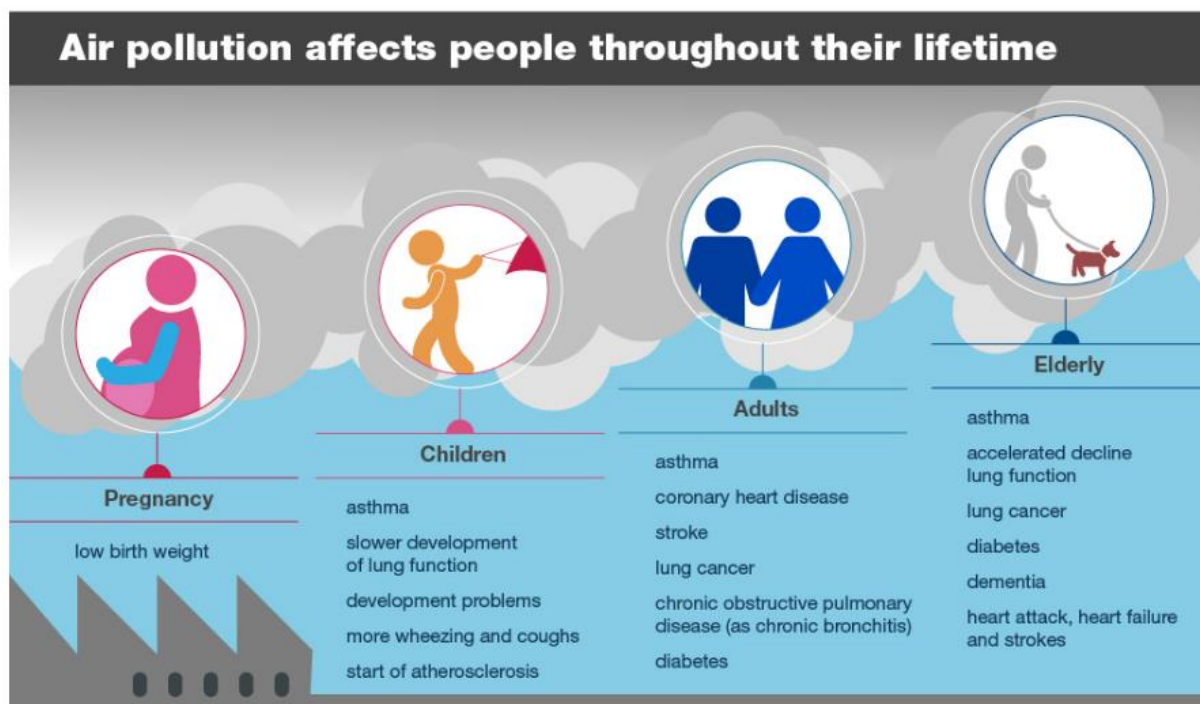


Though air pollution can be harmful to anyone at all stages of life, some people are disproportionately affected due to where they live, and the concentration of air pollution they are exposed to on a daily basis and their inherent susceptibility to health problems. Those who are most susceptible include children, older people, those with pre-existing cardiovascular or respiratory conditions, pregnant women and low income communities¹¹. Figure 3.2 below outlines the health effects of air pollution throughout life.

10 Clean Air Strategy 2019: <https://www.gov.uk/government/publications/clean-air-strategy-2019>

11 LAQM Policy Guidance 2022 – Defra <https://laqm.defra.gov.uk/wp-content/uploads/2023/11/LAQM-Policy-Guidance-2022.pdf>

Figure 3.2 – Health effects of air pollution throughout life¹²



Furthermore, 2020 saw the first occurrence of a person in the UK having air pollution recognised as a material contribution to their death, resulting from exposure to annual average exceedances of NO₂. The subsequent Prevention of Future Deaths report¹³, that followed, highlighted the public’s low awareness of national and local pollution levels including the health impacts. The report calls for better communication of these risks from local authorities and healthcare professionals and what people can do about them.

East Staffordshire Borough Council in collaboration with Staffordshire County Council, Staffordshire Moorlands District Council, and Cannock Chase District Council applied for a joint air quality grant in 2019 to fund the Air Aware Project. The bid was successful with the initial grant running from 2019 to 2020 and follow up

12 PHE. Health matters: Air pollution. London: Public Health England; 2018.

<https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-airpollution>

13 Regulation 30: Action To Prevent Future Deaths (judiciary.uk) <https://www.judiciary.uk/wp-content/uploads/2021/04/Ella-Kissi-Debrah-2021-0113-1.pdf>

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funding in 2021. The Air Aware Project has been used as an interactive learning resource, developed specifically for schools within or close to the AQMAs to raise awareness of the causes and harmful effects of air pollution through fun and engaging initiatives such as anti-idling campaigns, competitions, clean air day promotions and information packs etc. The idea behind this project is to empower children to act as advocates to their siblings, parents and wider community for reducing air pollution. The Air Aware project will continue with match funding from Staffordshire Public Health and Connectivity Teams to at least March 2025.

As part of the Air Aware Project, East Staffordshire Borough Council received funding in 2022 to enable the purchase of two low-cost air quality monitoring (Zephyr) sensors together with an air quality monitoring public portal that will help support further school (and business) engagement projects, particularly in and around the District's AQMAs as well as monitor temporal/spatial trends in air quality and any emerging hotspots of air pollution. Both Zephyrs were installed at two school locations late in 2023 and an external consultant Earthsense have since set up a MyAir® web app to provide a public online portal to enable district residents to understand air quality at a localised level which will run for at least two years. The Earthsense Zephyr is an iMCERTS certified real time air quality monitor that takes live measurements of ambient air pollutants, including nitrogen dioxide (NO₂), nitric oxide (NO), ozone (O₃), and particulate matter (PM₁, PM_{2.5}, PM₁₀). Measurements are sent back to the MyAir® web application, where air quality data can be viewed, analysed, and downloaded. Used in combination with the MappAir® air quality model, users can pull various insights about areas of interest, such as pollution hotspots, peak times, and identify nearby sources contributing to elevated levels. MyAir® web app is currently available from

<https://portal.earthsense.co.uk/EastStaffordshirePublic/>

In addition to the ongoing Air Aware project mentioned above, East Staffordshire Borough Council will continue to work closely with Staffordshire County Council's Public Health Team on identifying pollution/ deprivation/ vulnerability hotspots to help further target communications and focus for improving public health.

3.2 Planning and Policy Context

3.2.1 The National Planning Policy Framework

The National Planning Policy Framework (NPPF) (latest edition 2023)¹⁴ sets out the government's planning policies for England and how these should be applied. The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development and to achieve this, the planning system has three overarching objectives: economic, social and environmental. Air quality is highlighted within the 'Ground conditions and pollution' section of the NPPF states:

“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.”

3.2.2 The Local Plan for East Staffordshire

As part of the NPPF, East Staffordshire Borough Councils Local Plan (2012-2031) sets out the opportunities for development and presents clear guidance on what will or will not be permitted and where. The Local Plan includes Detailed Policy 7 'Pollution and contamination'

14 National Planning Policy Framework 2023 Update - GOV.UK <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

“Development proposals will only be granted planning permission where they will not give rise to, or be likely to suffer from, land instability and/or unacceptable levels of pollution in respect of noise or light, or contamination of ground, air or water”.

The Plan also includes Strategic Policy 34 which states;-

“Health and sense of wellbeing is a key part in the delivery of sustainable development as well as improving the health of East Staffordshire Borough’s communities. Development proposals should be delivered in order to enhance health, safety and a sense of well-being through:

- Providing high quality design which minimises and mitigates against potential harm from risks such as air, noise, water and light pollution as well as land contamination***
- Development proposals that maximise the opportunity for movement, social interaction and physical activity through green infrastructure (networks), sustainable transport routes including facilities for cycle storage, and open spaces, including where possible, community growing spaces such as allotments and community orchards.”***

3.2.3 East Staffordshire Borough Integrated Transport Strategy 2014 - 2031

Staffordshire County Council developed an Integrated Transport Strategy for East Staffordshire to help prioritise expenditure on transport improvements and secure potential resources including developer contributions and Government funds. The Integrated Transport Strategy also informs the Local Plan process.

The Integrated Transport Strategy measures formed the basis of many of the previous AQAPs actions, given that the air quality Objective exceedances for NO₂ related almost entirely to traffic emissions.

Although the Integrated Transport Strategy runs until 2031, many of the measures have now been completed. The Strategy will be reviewed by Staffordshire County Council when our Local Plan is next reviewed.

The Connectivity & Sustainability Team at Staffordshire County Council are undertaking additional projects on the local road network however, many of which can help contribute to improving air quality.

3.2.4 Air Quality Strategy for East Staffordshire Borough Council

In 2015 East Staffordshire Borough Council drafted an Air Quality Strategy, which set out the overarching framework through which air quality will be managed within the Borough and included our responsibilities under LAQM.

The Strategy consisted of two technical documents, which were the Air Quality Action Plan 2015-2020 and an Air Quality Policy for Development Control.

[Air Quality Strategy 2015-2020](#)

[Technical Document 1: Air Quality Action Plan 2015-2020](#)

[Technical Document 2: Air Quality Policy for Development Control](#)

The Air Quality Strategy for East Staffordshire has also been reviewed alongside this updated AQAP.

The overall aim of the new Air Quality Strategy for East Staffordshire Borough Council 2024-2029 is:

“To monitor and improve local air quality to reduce the detrimental impacts that poor air quality can have on human health and the environment.”

This Strategy supports the Council's Corporate Plan Priorities for “*Standing up for our Communities*” by improving the health and wellbeing of our communities, protecting our environment and tackling health inequalities.

East Staffordshire Borough Council is committed to updating and formally adopting a Supplementary Planning Document (SPD) for air quality and development control, building upon the current policy in the Technical Document 2 above.

3.2.5 Defra's Policy and Technical Guidance for LAQM In 2022

In 2022, Defra updated their Technical (LAQM.TG22)¹⁵ and Policy (LAQM.PG22)¹⁶ guidance for Local Air Quality Management. The key changes in the Policy guidance set out clearer requirements for district and county tier Councils to work together to ensure air quality is improved, as shown below:

- In paragraph 3.2, chapter 3 - ***“There are obligations on both district and county councils within Part IV of the Environment Act 1995. The Environment Act 2021 ensures that responsibility for solutions to poor air quality is shared across local government”***
- Paragraph 3.8 chapter 3 states ***“The County Council will be required to commit to appropriate actions the county council will take to secure that air quality objectives are achieved”***.
- Paragraph 3.12 chapter 2 states ***“If informed by a district council of its intention to prepare an AQAP, a county council must propose specific measures it will take to help secure the achievement and maintenance of air quality standards and objectives in the relevant district local authority's area, including target dates by which the measures should be carried out. District councils should incorporate county council proposals and dates in their AQAP”***.
- Paragraph 3.14, chapter 3 states ***“There is very strong evidence on the significant contribution of transport emissions to air pollution in urban areas and the legislation requires county councils to bring forward measures in relation to addressing the transport impacts for inclusion in any AQAP”***

15 Technical Guidance (TG22): <https://laqm.defra.gov.uk/wp-content/uploads/2022/08/LAQM-TG22-August-22-v1.0.pdf>

16 Policy Guidance (PG22): <https://laqm.defra.gov.uk/wp-content/uploads/2023/11/LAQM-Policy-Guidance-2022.pdf>

3.2.6 The National Air Quality Strategy, the Environmental Targets (Fine Particulate Matter Regulations 2023 & Amendments to the Clean Air Act 1993

The Air Quality Standards Regulations 2010¹⁷ and Air Quality EU Exit Regulations 2019¹⁸ sets out a series of limit values for the protection of human health and critical levels for the protection of vegetation. The UK is currently exceeding the objective limits for NO₂ and PM₁₀ within London and a number of other air quality zones within the UK.

The Government's policy on air quality within the UK is set out in the Air Quality Strategy (AQS). The strategy published by Defra provides air quality standards and objectives as shown in Table 3.1 for key air pollutants, which are designed to protect human health and the environment. Of most concern in the UK are NO₂ and particulates. The AQS also sets out how the different sectors: industry, transport, and local government, can contribute to achieving the air quality objectives. Local authorities play a particularly important role. The strategy describes the Local Air Quality Management (LAQM) framework, whereby every authority is required to carry out regular reviews and assessments of air quality in its area to identify whether the objectives have been, or will be, achieved at relevant locations, by the applicable date. If this is not the case, the authority must declare an AQMA and prepare an action plan which identifies appropriate measures that will be introduced in pursuit of the objectives.

The AQS is designed to be an evolving process that is monitored and reviewed roughly every five years, the most recent revision being the 2023 Air Quality Strategy for England¹⁹.

17 Air Quality Regulations 2010 – Statutory Instrument 2010 No. 1001

18 Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019 – Statutory Instrument 2019 No. 74

19 Air Quality Strategy for England: framework for local authority delivery

https://assets.publishing.service.gov.uk/media/64e8963d63587000d1dbf9d/Air_Quality_Strategy_Web.pdf

Table 3.1 – Relevant Pollutant limit values

Pollutant	Objective	Concentration measured as	Date to be achieved (and maintained thereafter)
Nitrogen dioxide – NO ₂	40µg/m ³	Annual Mean	31 December 2005
	200 µg/m ³ not to be exceeded more than 18 times per year	1-hour mean	31 December 2005
Particulate Matter (PM ₁₀)	40µg/m ³	Annual Mean	31 December 2004
	50µg/m ³ not to be exceeded more than 35 times per year	24-hour mean	31 December 2004

Part 2 of the Environment Act 2021 has established a legally binding duty on the UK Government to set an annual mean target on the level of fine particulate matter (PM_{2.5}), these have been set in The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023²⁰. This places a greater emphasis on local authorities to work towards reducing emissions and/or concentrations of PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM_{2.5} has a significant impact on human health at no real safe level, including premature mortality, allergic reactions, and cardiovascular diseases.

There are now two legally binding targets to work towards:

1. Annual Mean Concentration Target – a maximum concentration of 10 µg/m³ to be met across England by the end of 31st December 2040.
2. Population Exposure Reduction Target - a 35% reduction in population exposure by the end of 31st December 2040 (“the target date”), as compared with the average population in 2018

Two interim targets have also been set for PM_{2.5} in the Environmental Improvement Plan (EIP) 2023.²¹ These targets are;

1. An interim Annual Mean Concentration Target of 12 µgm³ to be achieved by 2028
2. An interim Population Exposure Reduction Target of 22% by 2028 as compared with the average population in 2028

All four PM_{2.5} targets above have been incorporated into the 2023 UK Air Quality Strategy for England.

Within East Staffordshire, background PM_{2.5} concentrations in 2022 were below the interim EIP target of 12µgm³ and the long term target of 10µg/m³ at the national Automatic Urban & Rural Network monitoring station in the Eton area of Burton upon Trent. However, East Staffordshire Borough Council is determined to support these

20 The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 – Statutory Instrument 2023 No.96

21 HM Government, Environmental improvement Plan 2023, First Revision of the 25 Year Environment Plan

national targets and make improvements locally. Measures aimed at further reducing NO₂ concentrations in this updated AQAP will have co-benefits for reducing PM_{2.5} concentrations.

Furthermore, Part 4 of the Environment Act 2021 amended the Clean Air Act 1993 to introduce new provisions for enforcing smoke emissions in smoke control areas thereby helping local authorities reduce pollution from domestic burning. Domestic burning accounted for 27.3% of total PM_{2.5} emissions in 2021 across England. Changes to the Environment Act 2021 now enables local authorities to issue fines of between £175 and £300 with respect to the emissions of smoke coming from a chimney of any building, chimney for furnace of any fixed boiler and even stacks from moored vessels if the latter are included in the scope of a smoke control area. It is also now an offence to buy or sell unauthorised fuels for use in a smoke control area unless they are used on a Defra approved (i.e. exempt) appliance and contain the correct certification labelling on the packaging. Local authorities also have the option to take enforcement action under the Environmental Protection Act 1990 for statutory nuisance if the smoke emissions are deemed harmful to health or a nuisance. This applies everywhere in England and not just in a smoke control area. In East Staffordshire, the majority of Burton upon Trent is declared as a smoke control area as shown on the UK Air Website interactive smoke control area map at <https://uk-air.defra.gov.uk/data/sca/>. East Staffordshire Borough Council commits to raising awareness of the smoke control law changes via its website, social media and campaign work as well as introducing a new Smoke Control Policy setting out the enforcement procedures and charging for non-compliance. This has therefore been included as a measure within this updated AQAP with expected benefits to PM_{2.5} concentrations.

3.2.7 Environmental Permitting Regulations 2016 (as amended)

The operation of certain industrial processes have the capacity to pollute the air around us and are consequently regulated by Local Authorities under a strict Licensing regime in accordance with the Environmental Permitting Regulations 2016 (as amended). There are three levels of control:

- Part A1 Controlled by the Environment Agency
- Part A2 Controlled by East Staffordshire Borough Council
- Part B Controlled by East Staffordshire Borough Council

From a local authority perspective, Part B installations, predominately cover emissions to air while A2 installations includes emissions not only to air but water and land and have further requirements related to waste and environmental management requirements.

Regulated industrial sectors include:

- Animal and plant processing
- Printing processes
- Painting and coating processes
- Ceramics and glass manufacturing industries
- Ferrous and non-ferrous metal processing and manufacture
- Timber working and preservation industries
- Cement and lime industries
- Combustion and waste incineration activities
- Chemical industries
- Minerals industries

Permits are based on Process Guidance Notes for each sector and for both Part B and A2 installations, which are based on 'best available techniques' and set emission limits for the various types of processes. Currently East Staffordshire Borough Council regulates two Part A2 permitted sites and forty four Part B permitted sites.

3.2.8 Climate change policies

East Staffordshire Borough Council declared a 'Climate Emergency' in August 2020 and now has a target:

“To make the Council’s activities carbon neutral by 2040 and aspires to make the Borough carbon neutral by 2050”

In March 2022, the Council carried a motion to support nature’s recovery across the Borough and committed to several additional actions to protect and enhance nature.

Following the declaration of the Climate Emergency, the Council published an interim Climate Change Action Plan containing fifty seven actions.

A Climate Change and Nature Strategy 2022 has also been published to accompany the Action Plan and both documents will be reviewed on an ongoing basis. Both documents can be viewed on the Council’s Climate Change pages of its website at [Climate change and nature recovery](#) are now considered in all East Staffordshire Borough Council decisions, strategies, policies and plans.

The Council is in a key position to take action on climate change, in the way it manages its own estate and assets, and in leading the community through its roles as a regulator and as a service provider

Over the next few years East Staffordshire Borough Council’s delivery will be focused upon the following objectives:

- Reduce energy consumption and emissions from our own activities
- Promote green travel and transport
- Protect and enhance our environment
- Improve air quality
- Reduce fuel poverty
- Reduce waste
- Sustainable development

Section 7 of the Climate Change Action Plan contains measures for the provision of Electric Vehicle (EV) charging infrastructure and improving public transport, while Section 8 of the Plan includes measures to improve air quality.

3.3 Source Apportionment

The AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within East Staffordshire Borough Council's area.

In order to develop appropriate measures to further improve air quality within AQMA 1 and inform the AQAP, it is useful to identify the sources contributing to NO₂ concentrations within 10% of the annual mean objective.

A previous detailed source apportionment modelling exercise was undertaken as part of the 2008 Further Assessment for the original 2009 AQAP. This exercise identified that road transport accounted for between 94.5% and 99.4% of total NO_x, while industrial contributions were very small at the modelled locations. If anything, the proportion of NO₂ resulting from industrial sources are likely to have reduced since the 2008 Further Assessment, due to the cessation of a number of industrial operations. Taking these factors into consideration, East Staffordshire Borough Council has carried out a simple source apportionment exercise this time round, using the emissions factor toolkit to ascertain which vehicle type contributes more to roadside NO_x.

Air pollution sources can be quantified in terms of emissions (the amount of pollutants released into the atmosphere from a source) or the concentration of pollutants in a location (air quality). The source apportionment presented in this section uses emissions. Emissions are related to concentrations, but not in a linear way, due to the effects of meteorology and atmospheric chemistry. While it is exposure to elevated pollutant concentrations that has direct health effects, measures to reduce emissions will minimise these impacts and therefore still provides a useful approximation.

Source apportionment has been carried out using road traffic data from 2019. Traffic data for each link within AQMA 1 was sourced from the Department for Transport (DfT). The onset of the Covid-19 pandemic and the restrictions that followed led to marked reductions in road traffic during 2020 and 2021 that in turn gave rise to a notable reduction in air pollutant emissions, hence using pre-pandemic 2019 traffic data provides a more conservative approach.

Source apportioned NO_x emissions have been calculated taking account of the different proportions of emissions emitted by different vehicle types along each link of East Staffordshire Borough Council Air Quality Action Plan - 2024

AQMA 1. The different proportions have been calculated using the latest Emission Factor Toolkit (EFT version 12.0.1 available at <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/emissions-factors-toolkit/>)

DFT traffic data is split into cars/taxis, LGVs, buses, rigid HGVs, articulated HGVs and motorcycles. Splits between diesel and petrol cars utilises the national splits available in the EFT.

The following categories have therefore been included in the source apportionment:

- Petrol Cars/Taxi's;
- Diesel Cars/Taxi's;
- Petrol LGVs;
- Diesel LGVs;
- Petrol Hybrid & Plugin Hybrid Cars/Taxi's;
- Diesel Hybrid Cars/Taxi's;
- Conventional Buses and Coaches;
- Hybrid Buses;
- Rigid Articulated Heavy Goods Vehicles (HGVs);
- Articulated HGVs; and
- Motorcycles

Figures 3.3 to 3.6 show the percentage contribution of each vehicle type to total predicted NO_x emissions along each road link of AQMA 1. The largest proportion of road NO_x emissions for all links within AQMA 1 is from diesel cars/taxis (ranging from 41.8% to 49.2%); followed by diesel LGVs (ranging from 23.1% to 29%) and rigid HGVs (7.7% to 13.8%). Although HGV contributions to road NO_x emissions are higher within the A5121 Wellington Street/Derby Street link compared to other links within the AQMA, their contribution overall is not disproportionate.

Although Petrol LGVs, Petrol/Diesel Hybrid Cars/Taxi's, Hybrid Buses and Motorcycles have been included in source apportionment calculations, emissions from these sources make up <0.2% of total NO_x emissions and therefore these sources will not be considered further.

Figure 3.3 – Percentage Contributions of Different Sources to Total Predicted NOx Road Emissions in 2019 along the A5121 – Wellington Street/Derby Street link

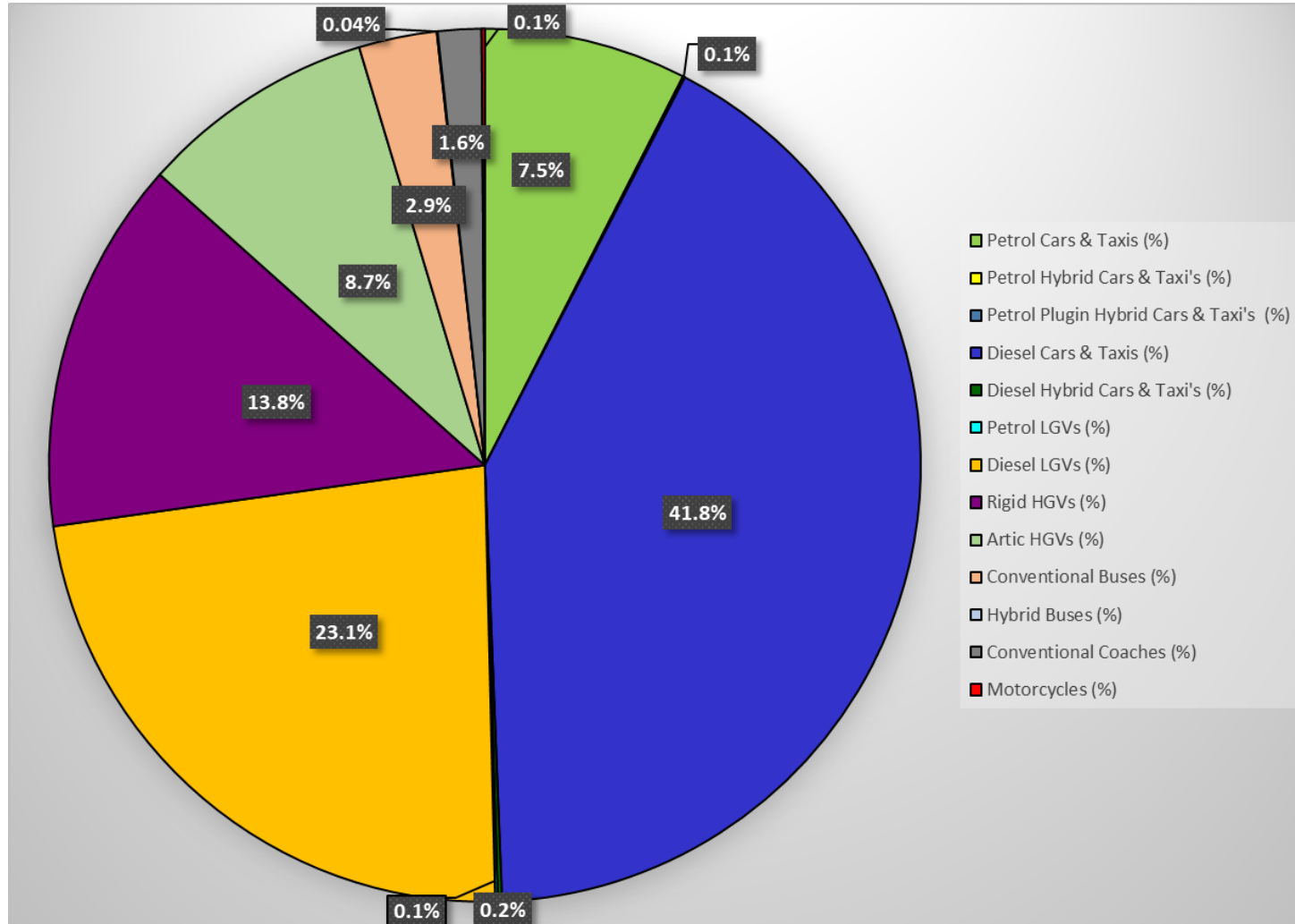


Figure 3.4 – Percentage Contributions of Different Sources to Total Predicted NOx Road Emissions in 2019 along the A5121 – Derby Road link

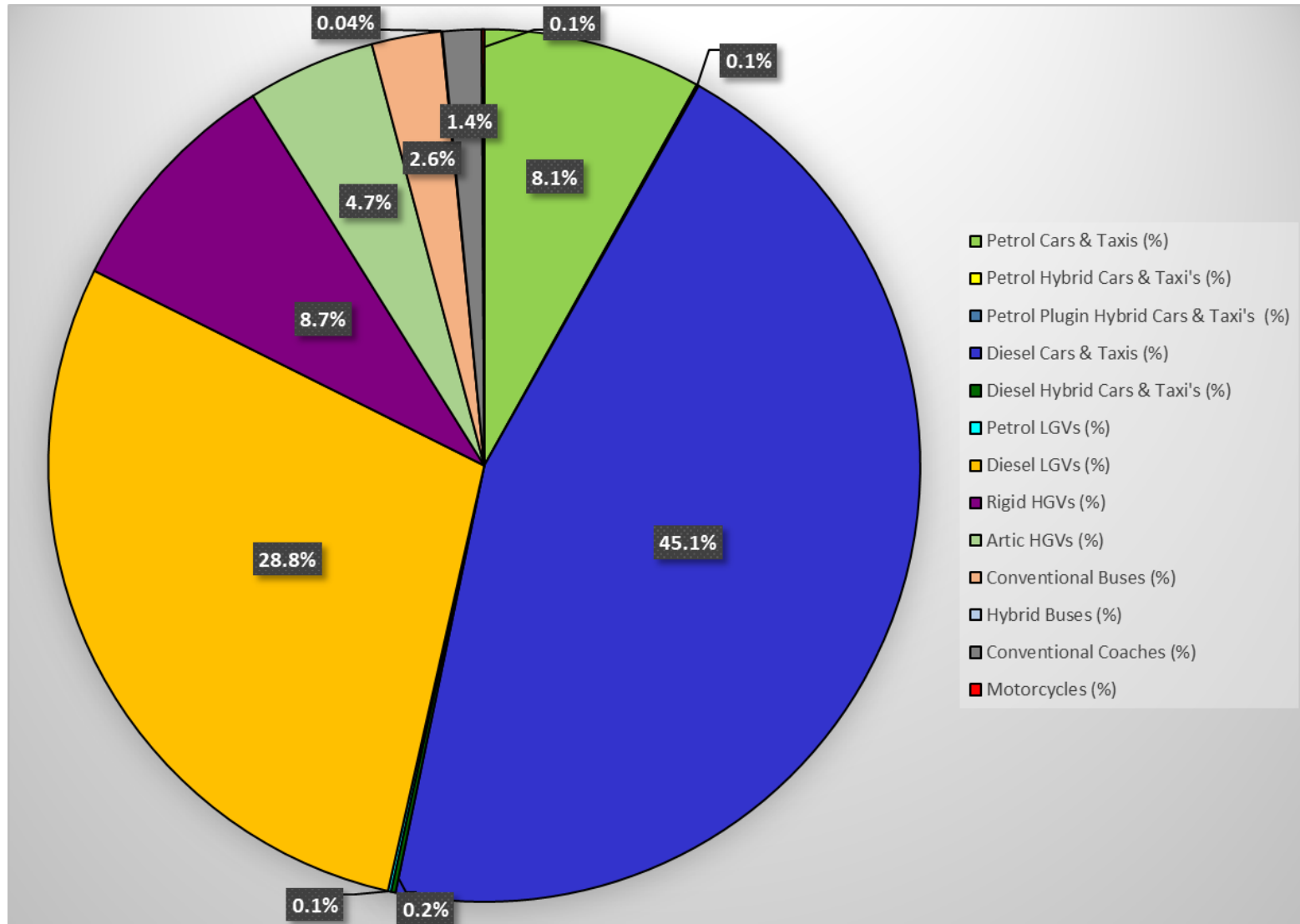


Figure 3.5 – Percentage Contributions of Different Sources to Total Predicted NOx Road Emissions in 2019 along the A511 – Horninglow Street link

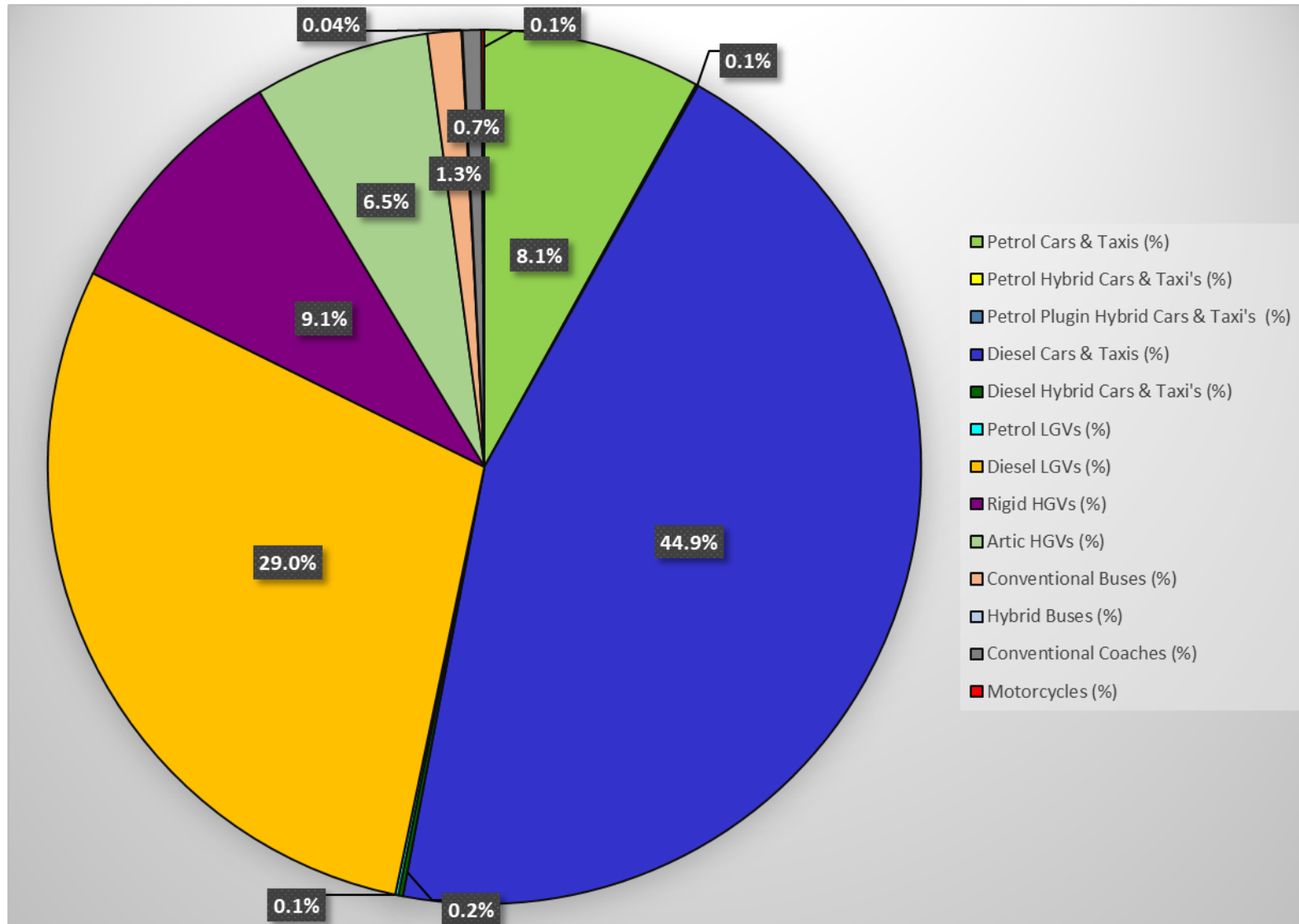
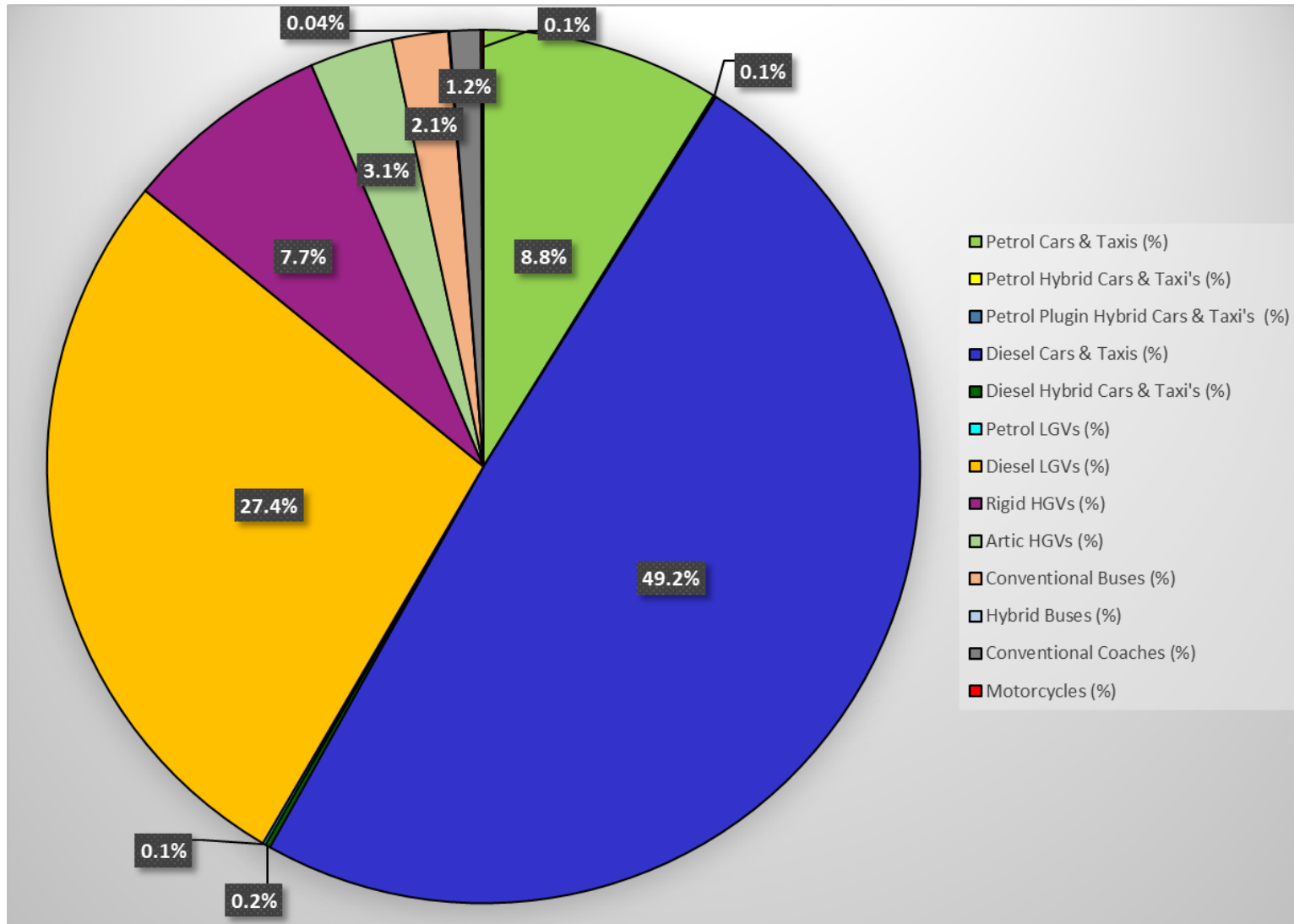


Figure 3.6 – Percentage Contributions of Different Sources to Total Predicted NOx Road Emissions in 2019 along the A511 – Horninglow Road link



3.4 Required Reduction in Emissions

For NO₂ alongside roads, the required reduction should be stated as the concentration reduction in µg/m³, for example, a 5µg/m³ reduction from 45µg/m³ to 40µg/m³. However, any required percentage reductions of local emissions need to be expressed in terms of NO_x due to the local road traffic. This is because the primary emission is NO_x and there is a non-linear relationship between NO_x concentrations and NO₂ concentrations. Calculation of the NO_x reduction requires the current 'road NO_x' concentration (road NO_x-current) to be calculated, i.e. the difference between total NO_x (calculated or measured) and local background NO_x. The next step would be to calculate the road NO_x concentration required to give a total NO₂ concentration of for example 40µg/m³ (road NO_x-required). This can be done using the NO_x to NO₂ calculator in accordance with Box 7-6 (Chapter 7 of LAQM.TG22), by entering a total NO₂ concentration of for example 40µg/m³, along with the local background NO₂ concentration. The ratio of 'road NO_x-required' to 'road NO_x current' gives the required percentage reduction in local road NO_x emissions to achieve the objective.

In the case of East Staffordshire Borough Council, NO₂ concentrations have consistently been below the 40µg/m³ annual mean objective for the past three years. However, due to the uncertainties inherent with using diffusion tube data and the impacts associated with the Covid-19 pandemic on the reliability of any monitoring data, East Staffordshire Borough Council has used 36µg/m³ as the target value to meet (i.e. within 10% of the annual mean objective). Furthermore, pre-pandemic 2019 measured and background data has been used as a precaution. This provides some headroom in case of any fluctuations in road NO_x concentrations over the next few years.

The improvement required in road NO_x emissions to reduce equivalent NO₂ concentrations to below 36µg/m³ (i.e. >10% of the annual mean objective) at monitoring sites DT8, DT15, DT22 and DT28 are shown in Table 3.2. Based on these conservative estimates a 9% decrease in road NO_x emissions is required to meet the target 36µg/m³ NO₂ concentration at monitoring site DT8, a 17% decrease is required at monitoring site DT15, a 22% decrease is required at monitoring site DT22, and a 41% decrease is required at monitoring site DT28.

Table 3.2 – Percentage Decrease in Road NOx required to bring concentrations below 36µg/m³ (>10% of the Annual Mean Objective) at Diffusion Tube Sites within AQMA 1 in 2019

Site ID	Diffusion tube NO ₂ , µg m ⁻³	Background NO ₂ µg m ⁻³	Road NO _x , µg m ⁻³	Road NOx Reduction, µg m ⁻³	Road NOx Reduction, (%)
DT8 - Horninglow Street (Road NOx current)	37.4	20.587	33.75		
DT8 - Horninglow Street (Road NOx required)	36	20.587	30.75	3	9
DT15 - Derby Street - nr to Derby Turn (Road NOx current)	39	20.587	37.24		
DT15 - Derby Street - nr to Derby Turn (Road NOx required)	36	20.587	30.75	6	17
DT22 - Derby Road approaching Derby Turn (Road NOx current)	36.6	17.01326	39.21		
DT22 - Derby Road approaching Derby Turn (Road NOx required)	36	20.587	30.75	8	22
DT28 - Wellington Street Crossing (Road NOx current)	40.8	15.12195	52.44		
DT28 - Wellington Street Crossing (Road NOx required)	36	20.587	30.75	22	41

3.5 Key Priority Themes

Key priority themes, identified from the evidence above, have been integrated into actionable measures within this AQAP to deliver compliance with Air Quality Objectives (AQO) primarily for AQMA 1. This will not only improve air quality within AQMA 1 but the borough as whole. These key priority themes are:

Priority Theme 1 – To reduce NO₂ concentrations even further within AQMA 1 to below 36µg/m³. This will be achieved through various supporting transport measures, including those to increase the uptake of walking and cycling and increasing the proportion of electric vehicles in the fleet (in relation to buses, our own waste fleet and private cars). Robust monitoring will provide the evidence base to monitor progress and enable the AQMA to be revoked within the next few years.

Priority Theme 2 – To reduce emissions from development and regeneration through the formal adoption of a Supplementary Planning Document (SPD) for air quality.

Priority Theme 3 – To lead by example by reducing our own emissions and develop more internal/external working groups to maximise joint opportunities to improve air quality and address climate change. This will help ensure air quality and climate change themes are integrated into Council decision making and policies.

Priority Theme 4 – To raise awareness of air quality issues and provide information and guidance to members, businesses and residents as to how they can protect themselves and be part of the solution. This will help promote behaviour change that not only works towards improving air quality and human health but also improves fitness, mental well-being and tackles health inequalities.

Priority Theme 5 – To work towards reducing PM_{2.5} emissions across the borough. Measures to reduce NO₂ will have co-benefits for PM_{2.5} emissions. The Council is also committed to enforcing the new smoke control laws to help reduce domestic PM_{2.5} emissions.

4 Development and Implementation of East Staffordshire Borough Council’s AQAP

4.1 Consultation and Stakeholder Engagement

In developing/updating this AQAP, we have engaged 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. East Staffordshire Borough Council will consult in line with the Council’s Communication Strategy.

Table 4.1 – Consultation Undertaken

Consultee	Consultation Undertaken
The Secretary of State	Scheduled from April 2024
The Environment Agency	Scheduled from April 2024
The highways authority	Scheduled from April 2024
All neighbouring local authorities	Scheduled from April 2024
Other public authorities as appropriate, such as Public Health officials	Scheduled from April 2024
Bodies representing local business interests and other organisations as appropriate	Scheduled from April 2024

4.2 Steering Group

East Staffordshire Borough Council

Various internal departments were involved in the formulating of measures included within this AQAP. These departments include:

East Staffordshire Borough Council

-The Environmental Health Team

This Team has various functions in relation to air quality, including the implementation of the requirements of the LAQM regime. This comprises of policy and report writing, monitoring air quality, regulating industrial installations and enforcing legislation.

-The Development Control Team

The responsibilities of this department include implementing the planning regime and drafting the Local Plan and other important planning policy documents, including those which affect air quality.

-The Regeneration Team

This Team is responsible for the regeneration of the borough, including larger projects that may incorporate beneficial air quality measures.

-The Environment Team

This department is responsible for waste management functions, including the ownership of the majority of the Council's fleet.

-The Climate Change Team

This Team undertakes work around climate change mitigation and adaptation. Much of this work also has positive air quality benefits, although it is important to ensure that there are no negative trades-offs with measures.

-The Communication Team

This Team directs the Council's consultation and communications strategies, including the work undertaken in relation to this AQAP.

Staffordshire County Council

Staffordshire County Council were also involved in the formulation of measures for the AQAP.

-Connectivity & Sustainability Department

The County Council's Connectivity Team are responsible for the borough highways (with the exception of trunk roads) and are crucial in supporting the AQAP through the implementation of measures that help reduce congestion and support public transport and alternatives to the car.

East Staffordshire Borough Council

This Team also supports school engagement projects within East Staffordshire, helping raise awareness to air quality.

Connectivity & Sustainability Department also coordinate grant bids for projects which benefit air quality in East Staffordshire.

-The Public Health & Prevention Department

The Team helps raise awareness to the impacts of poor air quality on health, and helps support the funding of project work.

5 AQAP Measures

The measures in this updated AQAP focus on improving air quality primarily within AQMA 1, although some will have benefits across the whole borough for both NO₂ and particulates. The majority of the measures are soft measures that will work towards reducing NO₂ concentrations to below 36µg/m³.

Table 5.1 shows the East Staffordshire 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

Measure 1: Procurement of electric buses on Service 9 that operates within Burton AQMA 1 (Zebra2 bid)

Staffordshire County Council's Connectivity and Sustainability Team and Diamond Bus ('Bus Operator') submitted a joint bid to fund further electric buses for service 9. This application was submitted in December 2023 and a letter of support was provided by East Staffordshire Borough Council. This bid was submitted through the DfT Zero Emission Bus Regional Areas (ZEBRA) 2 scheme that has been set up to provide £129 million (England total) to support the introduction of zero emission buses (ZEBs) in financial years 2023 to 2024 and 2024 to 2025. This is a single-stage funding competition to award funding over both financial years. Since the first

Draft of this AQAP, it has been confirmed the bid was successful which now enable the introduction of 6 new zero emission buses within the Diamond Bus fleet.

Funding Sources: DfT Zebra2 / Bus Operator Contribution.

Cost: £1 million - £10 million

Measure 2: Traffic signal reconfiguration within AQMA 1

Staffordshire County Council are planning to update and replace the existing traffic signal furniture on the Wellington Street/ Borough Road / Derby Street gyratory which is within AQMA 1 and where the highest NO₂ concentrations have historically been recorded. The existing traffic signals are old and consists of 4 junctions and 4 pedestrian crossing's which are run off 2 controllers. The life cycle of a traffic signal asset is approximately 15 to 20 years, the last upgrade was 19 years ago. The gyratory has experienced a number of faults in the past two years. The high fault rates are due to ageing equipment. This is a critical part of the network which needs to be renewed as well as modified to make the gyratory operate more efficiently. In turn this will help improve traffic flow and reduce congestion around this gyratory, Wellington Street and Derby Street and reduce roadside NO₂ concentrations which historically have been recorded at higher concentrations in this locality.

Funding Sources: DfT Integrated Transport Block Funds.

Cost: £100k - £500k

Measure 3: Schools Engagement (Air Aware Project)

As mentioned earlier in this document, East Staffordshire Borough Council in collaboration with other Staffordshire Districts applied for a joint air quality grant back in 2019 to fund the Air Aware Project. The project has provided school engagement, business engagement, and a communications campaign to raise awareness of air quality issues, across the District through the appointment of School Travel Advisors. The initial grant ran from 2019 to 2020, and built up significant local momentum, particularly with local schools, although the role programme was affected by the Covid-19 pandemic and associated restrictions. In April 2021, the consortium was successful in obtaining a Defra grant to continue with the funding of the Air Aware.

Phase 2 of the Air Aware project has focused further on the schools and community (small businesses) engagement programme. School engagement has mainly targeted areas where school traffic impacts on the borough's AQMA. Engagement has so far included

- Providing School assemblies on air quality,
- Active travel campaigns through an academic annual calendar,
- Accreditation of schools through STARS travel planning,
- Anti-idling campaigns to get parents to "switch off when they drop off"
- Provision of walking bus co-ordinators

Up to 2023, the Air Aware Project has engaged with 10 schools in the urban area of Burton upon Trent with 8,242 pupil engagements and 740 parent engagements with the school settings. Activities taking place specifically within East Staffordshire has included

- 5 Anti-Idling Campaigns at 5 different schools,
- 5 Hiking with a Viking activities to promote walking to school and park and stride locations at 5 different schools.
- Clean Air Day promotion in 8 schools across Burton upon Trent.
- Walk to School Week and Walk to School Month campaigns.
- Air Quality Monitoring using the hand-held monitor at 5 sites in Burton upon Trent
- Diffusion Tube Monitoring and sharing of data.
- 12 assemblies to promote air quality and active travel in Burton upon Trent
- New family resources and transition resources for 10 schools in the Burton Area to promote active travel.
- New infrastructure at 3 schools including cycle and scooter storage.
- 6 school travel plans with 4 accredited schools including 1 at Gold standard.
- Social media and newsletter promotion of air quality initiatives by schools.
- Bikeability and Scooter training including additional sessions for Air Quality schools.
- 8 "Anti-Idling Packs" supplied to Burton Schools and to 16 schools in total across the district with railing banners, boards and posters

As part of this AQAP, East Staffordshire Borough Council in partnership with Staffordshire County Council will commit to grow the schools and business engagement by;

- Providing continuity with schools and businesses engaged in phases 1 and 2 to ensure improvements are upheld
- Engage with large venues, sporting, and tourism attractions, where visitor transport choices impact on local air quality
- Target schools with lower than the national average walking rates by activities and production of travel plans
- Target businesses to support transition to electric vehicle fleet with additional support for active and sustainable travel through travel planning
- Continuous campaigns to link Air Aware to all relevant public health and climate change messaging
- Work closer with the Highways Laboratory to improve methods in capturing air quality data

Funding Sources: Remaining funds from Defra Air Quality Grant and Local match funding contributions sourced through Public Health.

Cost: £100k - £500k

Measure 4: Burton Towns Fund cycling and pedestrian route improvements

As part of the Burton Towns Fund, cycling and pedestrian improvements are planned to be delivered along Borough Road between the railway station and Town Hall, along connecting roads through residential areas, together with improved cycle provision on the A511. The scheme will remove acute barriers to cycling/ walking and is expected to achieve medium/ high value for money and will also help to deliver the Local Cycling and Walking Infrastructure Plan (LCWIP). This will help provide a more welcoming walking and cycling environment that encourages people to walk rather than drive thus improving fitness. This is a particular priority given that Staffordshire has a lower proportion of adults walking (16%) and cycling (1%) in 2018/19 (latest figures) when compared to the national average.

Funding Sources: Burton Towns Fund.

Cost: £500k - £1 million

Measure 5: Derby Street Walking and Wheeling

The A5121 Derby Street corridor in Burton has been identified as a priority corridor in Staffordshire's LCWIP 2021-2031 as it is a strategically important gateway into the town. A safer walking and wheeling environment will be created to ensure inclusive mobility along A5121 Derby Street urban corridor, including side road junction treatments, enhanced footways and safer crossing facilities.

Funding Sources: Active Travel Fund Round 3 managed by Active Travel England (ATE) on behalf of DfT.

Cost: £100k - £500k

Measure 6: Shobnall Road National Cycle Network (NCN)

Cycling infrastructure will be installed along Shobnall Road linking to NCN route 54 from the access to Shobnall Playing Fields with Anglesey Road, including installation of NCN signage. The network will be designed in accordance with the requirements of Local Transport Note (LTN) 1/20 to ensure it is coherent, direct, safe, comfortable and attractive. The project is located to the south west of Burton upon Trent and will remove a section of existing NCN 54 from a busy highway to a cycle route segregated from the highway. This will help to provide a healthier, safer and more welcoming environment for cyclists and encourage more people out of their cars, as well as wider benefits for physical and mental health.

Funding Sources: Paths for Everyone managed by Sustrans on behalf of DfT.

Cost: £100k - £500k

Measure 7: Installation of low cost Zephyr air monitors and launch of MyAir® public portal

Linked to the Air Aware Project (Measure 7), East Staffordshire Borough Council received funding for the purchase of two low-cost air quality monitoring (Zephyr) sensors together with the MyAir® web app to provide a public online portal to enable district residents to understand air quality at a localised level. The public portal will also help support further school (and business) engagement projects. The Zephyrs were installed at two school locations at the end of 2023, one at Horninglow Primary School located within AQMA 1 and the second at Outwoods Primary School just outside of the AQMA. Funding for this project is secured for at least two years and each Zephyr will be moved to a new location every six months or so. The public portal will be officially launched on East Staffordshire Borough Council's website early in 2024 and will be complemented with a press release and promotions through social media. Users of the public portal will be able to use the app as a one-stop shop of resources to gain an insight on health impacts of air pollution, pollution hotspots, peak times, and identify nearby sources contributing to elevated levels. This in turn will enable people to make more informed decisions on their own personal risks and using alternative modes of travel.

Funding Sources: Defra Air Quality Grant (secured for 2 years)

Cost: £10k - £50k

Measure 8: Development of a supplementary planning document (SPD) for air quality

East Staffordshire Borough Council already has an informal Air Quality Policy for Development Control. This document was first drafted in 2015 and was aimed at providing advice to stakeholders on how the Council assesses planning applications in relation to air quality. This document is not a formally adopted Supplementary Planning Document (SPD) however.

This document will be updated in the context of changes to planning and air quality legislation and guidance. This new document will then be considered for formal adoption as an SPD.

It is important to have a document that states how the Council will assess air quality impact in relation to the requirements of the NPPF. This document will clearly explain when an air quality assessment would be required and why. It will also explain what guidance and best practice should be followed to determine the significance of any impacts on air quality and when mitigation would be expected, or the circumstances of when a planning application may be refused due to unacceptable significant adverse impact on health or the environment.

Where the air quality is assessed as significant, we will continue to require a damage cost to be associated with this impact, which will then inform the mitigation process.

An SPD also allows the Council to secure S106 agreements as part of planning permissions for larger developments, helping to secure air quality improvements on site or on local highways projects.

Funding Sources: No external funding

Cost: N/A

Measure 9: Waste collection service electrification

East Staffordshire Borough Council has its own 'in house' waste collection service and is part of the Staffordshire Waste Partnership (SWP) (East Staffordshire Borough Council, Newcastle under-Lyme Borough Council, Lichfield District Council, and Tamworth Borough Council).

As part of the climate change agenda the SWP aims to fully decarbonise all the waste fleet in SWP by 2030.

A working group was established in the summer of 2023 and the first phase of the project was to apply to the Midlands Net Zero Hub for funding for a joint feasibility study of the 3 depot locations in the SWP for full, phased conversion to new technologies for the purpose of decarbonising the entire waste collection services fleet and depot (plus all associated vehicles). If successful this study will be delivered by July 2024, with the outcome shaping the direction of the overall decarbonisation programme.

Funding Sources: Midlands Net Zero Hub

Cost: £50k - £100k

Measure 10: Air quality monitoring review

The Council currently has an automatic monitoring station at Derby Turn which measures NO_x, NO₂ & NO and the data is fully quality controlled and assured. This data feeds into Defra's 'National diffusion tube bias adjustment factor system'.

We also have approximately 45 diffusion tubes at a number of locations across the borough, with the majority located within the AQMAs.

The Council will continue to annually review this network of diffusion tubes to ensure that the monitoring data is appropriate and cost-effective as well as being used to evaluate the effectiveness of the AQAP measures. This includes monitoring around the boundaries of the AQMAs and any areas of change outside of these areas.

Funding Sources: No external funding (in-house)

Cost: Approximately £5 per diffusion tube x no. of tubes

Measure 11: Development of an enforcement policy for enforcing the new smoke control laws

Domestic burning using wood and coal burning appliances is a major contributor to emissions of particulates, especially PM_{2.5} which is most damaging to human health. As mentioned previously in Section 3.1, the Environment Act 2021 amended the Clean Air Act 1993 to allow local authorities to issue a financial penalty of between £175 and £300. This financial penalty would be issued to any person responsible for smoke emissions in a Smoke Control Area from a chimney of any building, chimney for the furnace of any fixed boiler or industrial plant or moored vessels if the latter is included in a smoke control order. Enforcement action should not be necessary if an authorised fuel or an approved appliance is being used correctly. The new legislation removes the defence to say smoke emissions were caused by an authorised fuel. Essentially, the civil penalty regime makes it easier for local authorities to enforce than the previous criminal offence regime.

Guidance to local authorities for enforcing the new smoke control laws recommends the first step in the enforcement process should be to issue an Improvement Notice to the person responsible to raise their awareness of smoke control area rules and what they can and cannot burn. The second step would be to serve a Notice of Intent

stating the details of the offence and that the authority intends to issue them with a financial penalty. The Notice of Intent also gives the person responsible a right to object within 28 days of the service of the Notice. If no objection is received within 28 days the local authority would be expected to send a final Notice to the person responsible stating the financial penalty. The decision on how much to charge is up to the Council's own discretion but may be based on the severity or regularity of incidents. The Guidance therefore recommends local authorities develop their own policy setting out how they will investigate smoke control complaints and the charges they will apply.

Most of Burton upon Trent, excluding Branston and parts of Stretton are in a Smoke Control Area. East Staffordshire Borough Council will develop its own policy within the first year of this AQAP and will also produce educational material in leaflets, through the Council's website and social media to raise people's awareness of the new smoke control area laws.

Funding Sources: No external funding (in-house)

Cost: N/A

Measure 12: Taxi licensing policy incentives

The Council's Hackney Carriage and Private Hire Policy is being reviewed 2024-2029 and is currently out for consultation. All taxi vehicles now have to be compliant with Euro 6 emission standards, but we will be considering the viability of the incorporation of financial incentives within the Taxi Licensing Policy to encourage electric vehicle uptake.

Funding Sources: No external funding (in-house) at this stage

Cost: N/A

Measure 13: External and internal working groups

The Council is currently establishing working groups with partners to encourage inter-authority strategies, plans and initiatives in relation to climate change. Where relevant, we will look to incorporate air quality into these groups. We are already members of the Staffordshire Air Quality Forum, with other Staffordshire local

authorities and relevant highways and public health teams at Staffordshire County Council. We will look to develop these opportunities further for group work with outside agencies.

Similarly, an internal working group will be established for climate change and air quality at East Staffordshire Borough Council. This will encourage the identification of further actions to be taken forward and maximise joint opportunities to improve air quality and address climate change, whilst avoiding any negative trade-offs. This will help embed climate change and air quality themes into Council decision making and policies, and reduce silo working.

Finally, the Council will be introducing a cross party member group to discuss strategies and actions for climate change. We will also look at the opportunity to again, combine this with air quality. This will help raise air quality awareness with members.

Funding Sources: No external funding (in-house)

Cost: N/A

Measure 14: Communications and engagement plan

The Council will adapt its climate change Communications and Engagement Plan to incorporate air quality considerations. This will ensure improved communications of air quality information in relation to health effects, mitigation etc. This will also include improving our website to incorporate the new changes to the new smoke control laws and promoting the MyAir® web app, which provides a one stop shop of resources for users on various aspects of air quality, including an air quality model of the borough, managed by Earthsense.

Funding Sources: No external funding (in-house)

Cost: N/A

Measure 15: Electric Vehicle Charging Infrastructure Strategy

In March 2023 the Council's Electric vehicle charging Infrastructure Strategy was approved at Cabinet. This document supports Staffordshire County Council's Public

Electric Vehicle Charging Infrastructure Strategy to ensure a consistent and coordinated approach to the development of accessible charge points across the County.

Currently East Staffordshire Borough Council owns one rapid charger and two fast dual charge Electric Vehicle Charging Points (EVCPs) operating in Coopers Square, Burton, and there is one located in Trinity Square, Uttoxeter which is owned by National Highways. Separately, East Staffordshire Borough Council has EVCPs for staff at Millers Lane and Stapenhill Cemetery.

According to research conducted by Field Dynamics, Zap-Map and Ordnance Survey, in East Staffordshire, out of a total of 52,899 households, 17,122 (or 32%) have no access to off-street parking. Of these households, 16165 (or 94%) are not currently within a 5-minute walk of a public charger. It is important we address the needs of these residents to enable them to access EVCPs close to home and for a fair and just tariff, comparable to the rates residents with the space to charge at home are paying.

As part of the first stages of our Strategy, the Council is currently in the process of shortlisting local authority owned sites that would be suitable for EVCP infrastructure accessible for the public and would be eligible for funding via Staffordshire County Council under the government's Local Electric Vehicle Infrastructure (LEVI) funding. LEVI funding is also being considered for the various regeneration projects in East Staffordshire, where EVCP infrastructure can be integrated into development at an early stage.

Funding Sources: LEVI Funding

Cost: £500k - £1 million

Measure 16: Green New Deal for East Staffordshire

East Staffordshire Borough Council's 2023/24 Corporate Plan and Climate Change Action Plan includes a target for the development of a Green New Deal for East Staffordshire. The Green New Deal pulls together a number of cross cutting schemes and initiatives into one plan. The main focus of the Green New Deal is the promotion of green technologies, increasing the use of public transport, implementing energy-

efficient housing standards, establishing gardens and orchards, and working with partners on sustainability projects. A number of these measures have synergies with air quality and therefore this has been included as a measure within this AQAP.

The Green New Deal includes a target for the identification of public EVCPs across Council owned land covered in Measure 16 above. To complement this, the viability of solar charging units is being considered with opportunities to trial a pop-up solar EV charging solution as a part of the ongoing regeneration work taking place at the Maltings, Uttoxeter. The deployment of this would help boost the rollout of EV charging infrastructure.

Another key target is to work with local cycle firms to provide affordable bike rentals for residents and visitors. A briefing paper was completed by East Staffordshire Borough Council's Climate Change officers in December 2023. The paper provided an overview of existing local and national bike hire schemes and rental options, as well as a comparison of the pros and cons of the different models and technologies. Using analysis of local visitor and resident needs, the briefing will make recommendations for an affordable bike rental scheme that could increase sustainable transport in Burton upon Trent and other key destinations across East Staffordshire. This will provide considerable benefits to public health and support the reduction in transport related pollutants.

To complement the above, work is being done with the Tourism Team to map cycle routes around East Staffordshire, with a focus on linking key attractions and town centres. An app and associated promotional campaign is proposed to make finding and accessing these routes easy for visitors and residents further promoting active, sustainable travel around the borough.

Funding Sources: Various internal and external sources

Cost: >£90k

Measure 17: Environmental Permitting

Unlike road traffic, the contribution to air pollution levels from industrial sources in East Staffordshire is far less. However, the Council currently regulates 46 installations with respect to emissions to air under the Environmental Permitting Regulations 2016 (as amended). The Council will continue to exercise its duties

under this legislation, including identifying new sources as necessary, therefore it is important to include this as a carry-over measure within this AQAP. This will help to reduce overall background pollution levels from a wider range of pollutants than just NO₂ and particulates as well as helping to protect the health of those living, working and visiting the borough.

Funding Sources: In-house

Cost: N/A

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	Procurement of electric buses on Service 9 that operates within Burton AQMA1	Promoting Low Emission Transport	Public Vehicle Procurement – Prioritising uptake of low emission vehicles	2024	2025/26	Staffordshire County Council & Bus Operator (Diamond)	Zebra2 DfT Funding	No	Partial Funding from DfT & Bus operator	£1 million - £10 million from DfT & £1 million - £10 million from Diamond (Bus Operator)	Planning Phase	Lower NOx, PM ₁₀ and PM _{2.5} and carbon emissions 5 tonnes of NO ₂ savings and 131 kg PM savings estimated from the DfTs Greener Bus Model toolkit	Procurement of zero emission buses and increased bus patronage	Bid submitted in December 2023 with letter of support from East Staffordshire Borough Council. Bid confirmed to be successful, 6 zero buses expected to be introduced within the Diamond Bus Fleet over 2024-25	Higher than expected costs
2	Traffic signal reconfiguration within AQMA 1	Traffic Management	UTC, Congestion management, traffic reduction	2024	2025	Staffordshire County Council & East Staffordshire Borough Council	DfT (Integrated Transport Block)	No	Fully Funded	£100k - £500k	Planning Phase	Lower NOx, PM ₁₀ and PM _{2.5} emissions	Improved traffic flow, reduced congestion		
3	Schools Engagement through the Air Aware Project	Promoting Travel Alternatives	Other	2020	Ongoing	Staffordshire County Council & East Staffordshire Borough Council	Funded through Air Quality Grant for phases 1 and 2 (2020-2023) and Staffordshire Public Health and Connectivity Teams	Yes for initial phases	Partially Funded	£100k - £500k	Active	Lower NOx, PM ₁₀ and PM _{2.5} emissions around schools	Improved understanding and awareness of local air quality issues and encouragement of greener modes of travel	Ongoing work supporting Staffordshire County Council School Travel Advisors with campaign work such as vehicle idling, school travel plans, competitions and promotional work	
4	Burton Towns Fund cycling and pedestrian route improvements	Transport Planning and Infrastructure	Cycle Network	2025	2026	Staffordshire County Council & East Staffordshire Borough Council	Burton Towns Fund	No	Fully Funded	£500k - £1 million	Planning Phase	Lower NOx, PM ₁₀ and PM _{2.5} emissions	Installation of new cycle routes		Staff resources, increasing costs to deliver scheme and reduced funding

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
5	Derby Street walking and wheeling	Promoting Travel Alternatives	Promotion of Walking	2024	2025	Staffordshire County Council & East Staffordshire Borough Council	DfT (Active Travel Fund 3) managed by ATE	No	Fully Funded	£100k - £500k	Planning Phase	Lower NOx, PM ₁₀ and PM _{2.5} emissions	Promoting green modes of travel		Staff resources, increasing costs to deliver scheme and reduced funding
6	Shobnall Road National Cycle Network (NCN)	Transport Planning and Infrastructure	Cycle Network	2024	2025	Staffordshire County Council, Sustrans & East Staffordshire Borough Council	Paths for Everyone (DfT funds) managed by Sustrans	No	Fully Funded	£100k - £500k	Planning Phase	Lower NOx, PM ₁₀ and PM _{2.5} emissions	Installation of new cycle routes		Staff resources, increasing costs to deliver scheme and reduced funding
7	Installation of low cost Zephyr air monitors and launch of MyAir public portal	Public Information	Other	2023	2026	East Staffordshire Borough Council	Funded through Air Quality Grant as part of Air Aware Project in Measure 7 above	Yes	Fully Funded	£10k - £50k	Implementation	n/a	Improved understanding and awareness of local air quality issues and encouragement of greener modes of travel		Staff resources if staff leave and funds run out
8	Development of supplementary planning document (SPD) for air quality	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2024/25	2025/26	East Staffordshire Borough Council	Not Funded	N/A	N/A	N/A	Planning Phase	Lower NOx, PM ₁₀ and PM _{2.5} emissions Arising from new developments	Formal adoption of SPD		Staff resources if staff leave to deliver and monitor scheme
9	Waste collection service electrification	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2024	2030/31	Staffordshire Waste Partnership (consortium of 4 district/borough councils)	Midlands Net Zero Hub	No	Fully Funded	£50k - £100k	Planning Phase	Lower NOx, PM ₁₀ and PM _{2.5} and carbon emissions	Feasibility study for decarbonisation of entire waste collection services	A bid to fund the feasibility study for decarbonisation of the waste collection services has been submitted by the partnership. The partnership is awaiting confirmation of the success of the bid. The study will still go ahead even if the bid is unsuccessful, but funds may need to be sourced elsewhere.	Feasibility study will identify if decarbonisation of existing waste depot is possible, if not a new larger site would be required therefore incurring greater costs which may delay implementation

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
10	Air quality monitoring review	Public Information	Other	2024	Ongoing	East Staffordshire Borough Council	No external funding (in-house)	No	N/A	Approximately £5 per diffusion tube	Active	N/A	Monitoring of NO ₂ concentrations	Ongoing, periodic reviews of monitoring network to ensure monitoring is appropriate, cost effective and identify any changes in trends	Staff resources
11	Development of an enforcement policy for enforcing the new smoke control laws	Policy Guidance and Development Control	Other Policy	2024	2024/25	East Staffordshire Borough Council	No external funding (in-house)	No	N/A	N/A	Planning Phase	Lower PM ₁₀ and PM _{2.5} and emissions	Enforcement of smoke control laws		Staff resources
12	Taxi licensing policy incentives	Promoting Low Emission Transport	Taxi emission incentives	2024	Ongoing	East Staffordshire Borough Council	Initially no external funding	No	N/A	N/A	Planning Phase	Lower NO _x , PM ₁₀ and PM _{2.5} and carbon emissions	Taxi Licensing policy	The Council's Hackney Carriage & private Hire Policy 2024-2029 is currently out for consultation. Viability for incorporating incentives for EV uptake is being considered.	
13	External and internal working groups	Policy Guidance and Development Control	Other Policy	2024	Ongoing	East Staffordshire Borough Council, Staffordshire County Council & Other Agencies	No external funding (in-house)	No	N/A	N/A	Implementation Phase	N/A	Formation of targeted Working Groups	Currently East Staffordshire Borough Council has a working group through the Staffordshire Air Quality. Moving forward this will be expanded to other internal and external groups combining both air quality and climate change	Staff changeover
14	Communications and engagement plan	Public Information	Other	2024	2025	East Staffordshire Borough Council	No external funding (in-house)	No	N/A	N/A	Planning Phase	N/A	Combined Communications and Engagement Plan for air quality and climate change		Staff changeover & resources

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
15	Electric Vehicle Charging Infrastructure Plan	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, Gas fuel recharging	2022	2030/31	East Staffordshire Borough Council & Staffordshire County Council	LEVI Funding	No	Fully Funded	£500k-£1million	Implementation Phase	Lower NOx, PM ₁₀ and PM _{2.5} and carbon emissions	EV Charging Infrastructure	Three EVCPs have already been installed in Coopers Square, Millers Lane and Stapenhill Cemetery in Burton and one located in Trinity Square, Uttoxeter	Increasing costs, lack of funds
16	Green New Deal for East Staffordshire	Promoting Travel Alternatives	Other	2023	Ongoing	East Staffordshire Borough Council, Staffordshire County Council, Bike Companies	Various internal and external	No	Fully Funded	>£90k	Implementation Phase	Lower NOx, PM ₁₀ and PM _{2.5} and carbon emissions	Promoting green travel alternatives & sustainability		Increasing costs, lack of funds
17	Environmental Permitting	Environmental Permits	Other	2024	Ongoing	East Staffordshire Borough Council	No external funding (in-house)	No	N/A	N/A	Implementation Phase	Lower NOx, PM ₁₀ and PM _{2.5} and other pollutant emissions	Environmental Permitting Regulation		Staff changeover & resources

Appendix A: Response to Consultation

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

Consultee	Category	Response

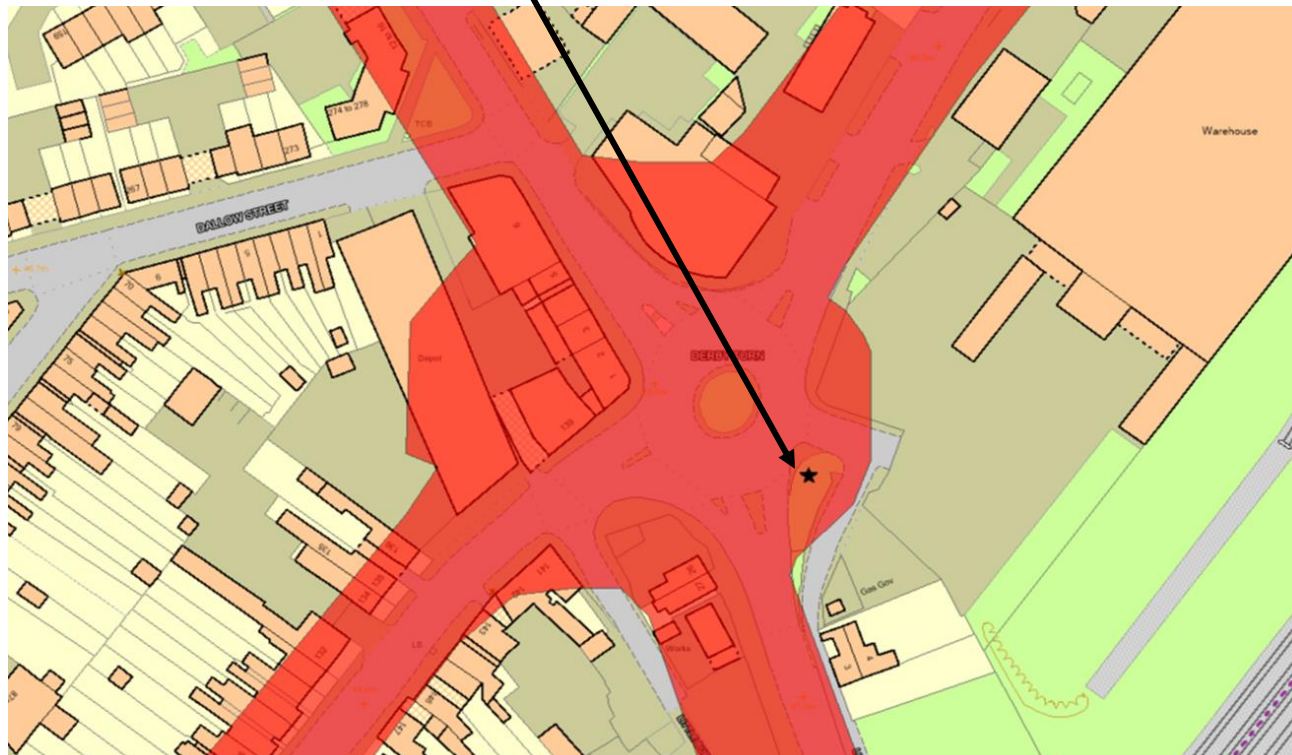
Appendix B: Reasons for Not Pursuing Action Plan Measures

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)

Appendix C: East Staffordshire Borough Council Monitoring Locations

Figure C.1 – The automatic monitoring station at Derby Turn, Burton upon Trent (Note: monitoring ceased in 2024)



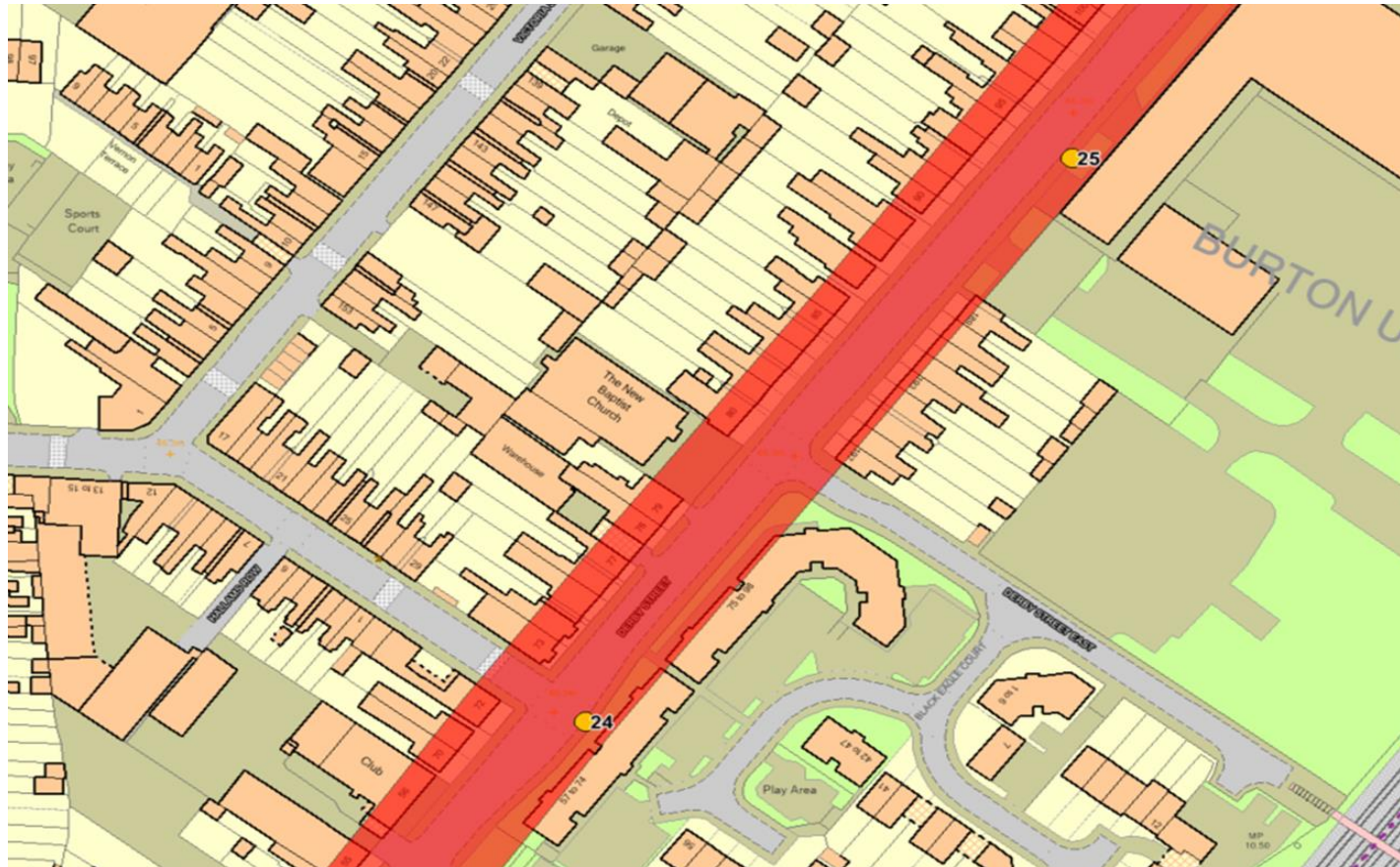
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Figure C.2 – Diffusion tubes - Burton upon Trent, AQMA 1 – Derby Turn



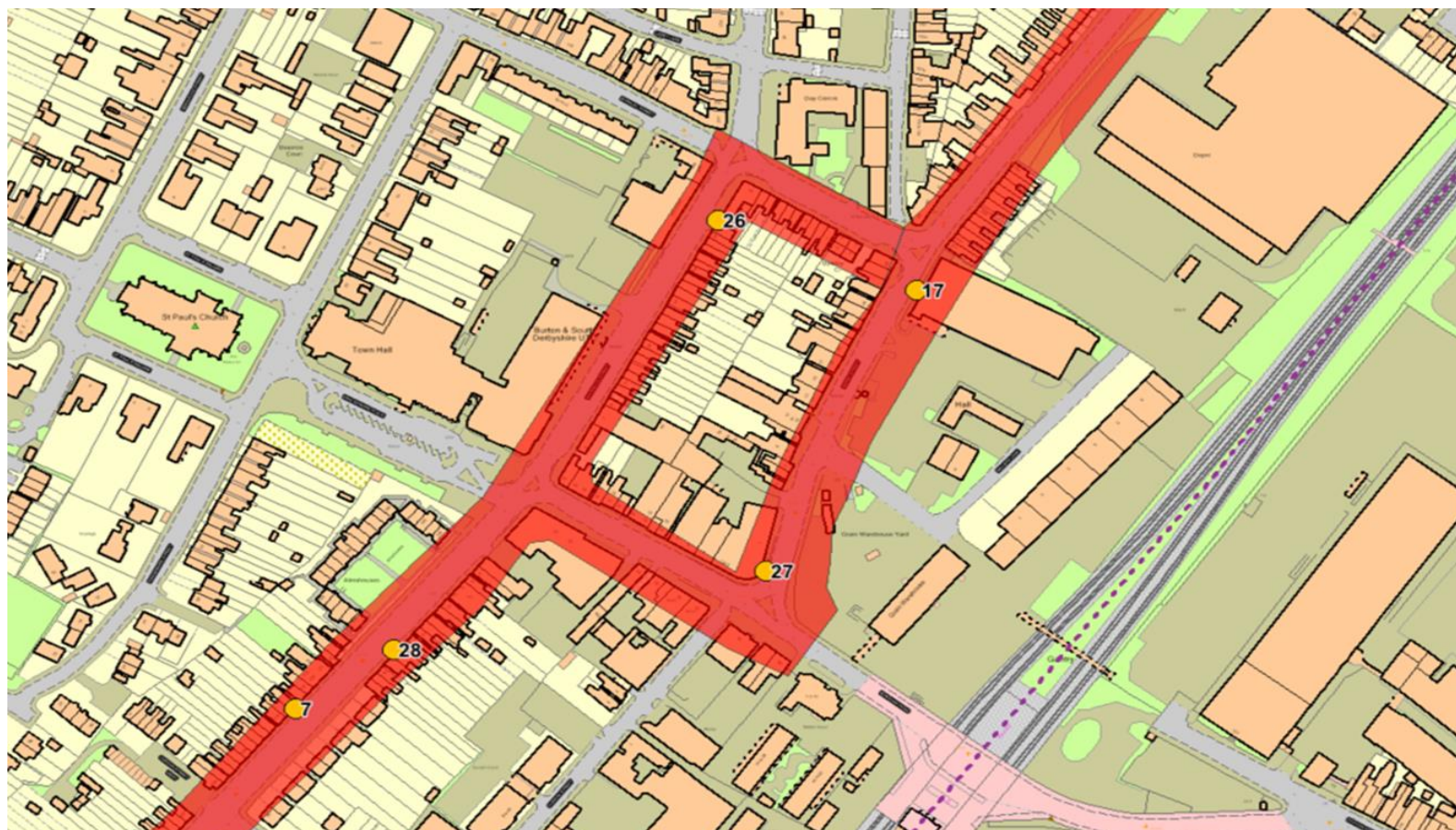
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Figure C.3 – Diffusion tubes - Burton upon Trent, AQMA 1 – Derby Street



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Figure C.4 – Diffusion tubes - Burton upon Trent, AQMA 1 – Wellington Street/ Waterloo Street/ Derby Street



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Figure C.5 – Diffusion tubes - Burton upon Trent, AQMA 1 – Derby Road



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Figure C.6 – Diffusion tubes - Burton upon Trent, AQMA 1 – Horninglow Road



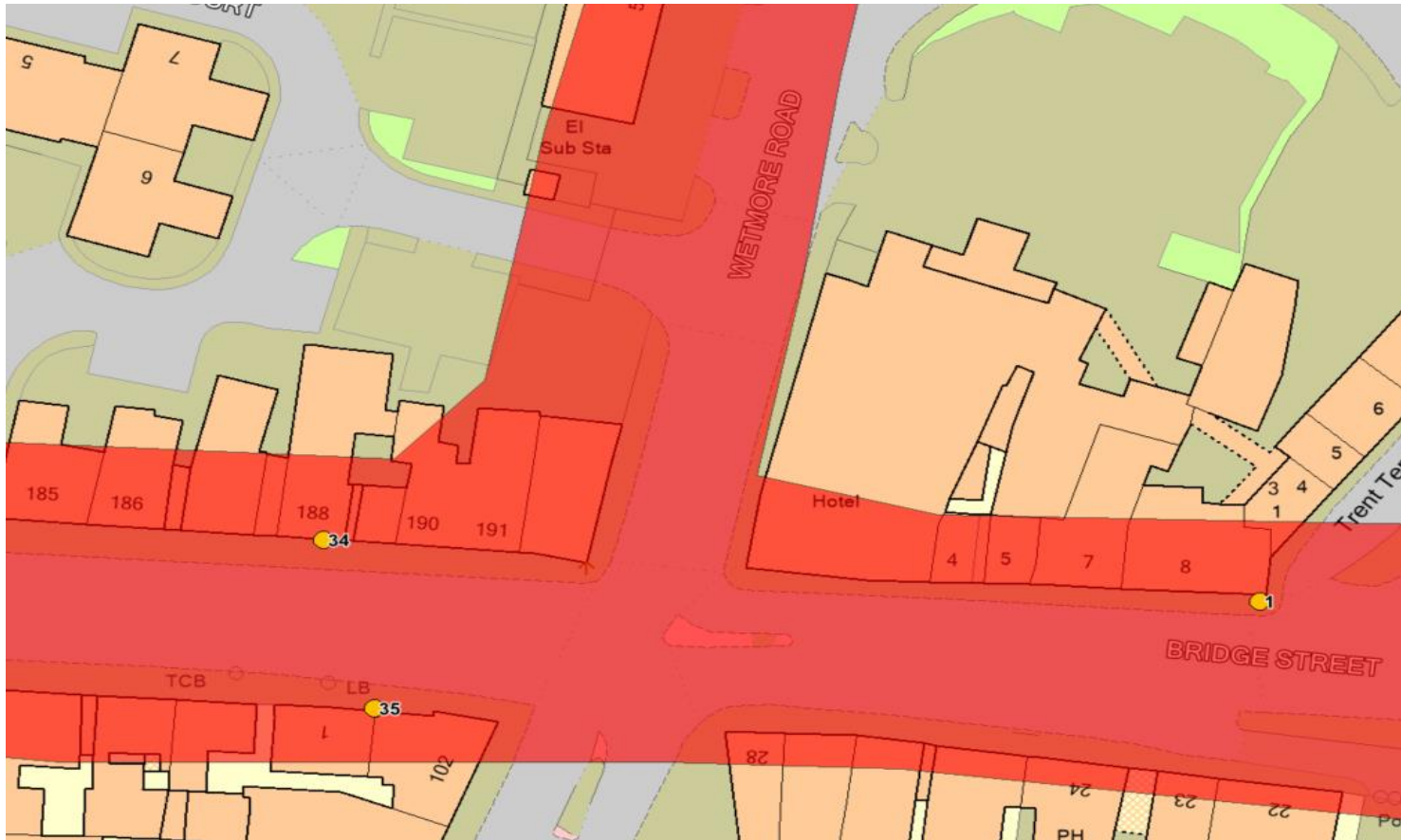
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Figure C.7 – Diffusion tubes - Burton upon Trent, AQMA 1 – Horninglow Street



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Figure C.8 – Diffusion tubes - Burton upon Trent, AQMA 1 – Bridge Street



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Figure C.9 – Diffusion tubes - Burton upon Trent, AQMA 1 – Horninglow Croft



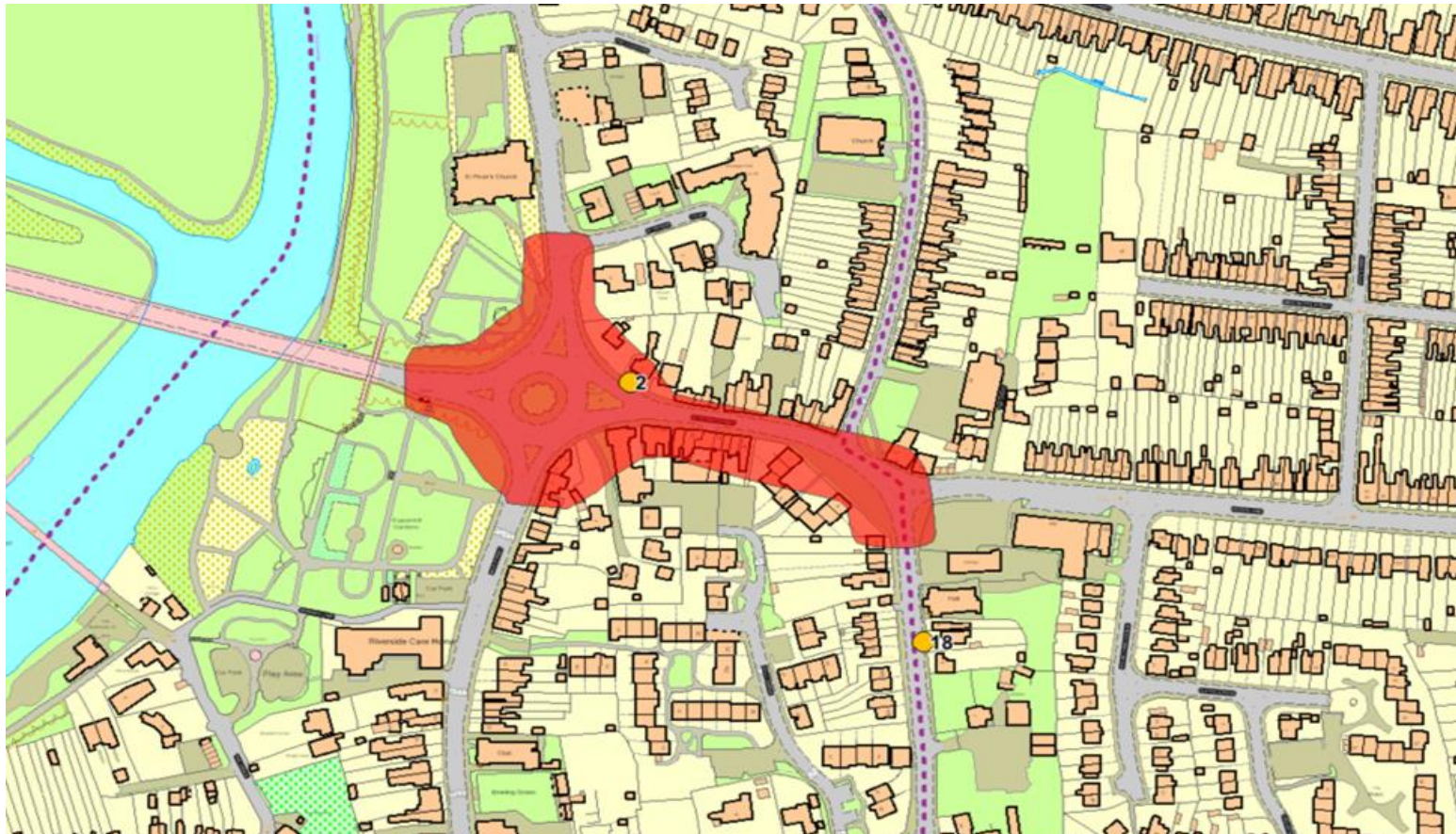
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Figure C.10 – Diffusion tubes - Burton upon Trent, AQMA 1 – Wellington Street/ Shobnall Road



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Figure C.11 – Diffusion tubes - Stapenhill, AQMA 2 – St Peters Bridge Roundabout/A444 St Peters Street



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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
AQO	Air Quality Objective
ASR	Air quality Annual Status Report
ATE	Active Travel England
AURN	Automatic Urban and Rural Network
CO ₂	Carbon Dioxide
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DT	Diffusion Tube
EFT	Emission Factor Toolkit
EIP	Environmental Improvement Plan
EU	European Union

East Staffordshire Borough Council

EV	Electric Vehicle
EVCP	Electric Vehicle Charging Points
HGV	Heavy Goods Vehicle
iMCERTS	Indicative Monitoring Certification Scheme – Indicative monitor is compliant against the Environment Agency’s performance standards for particulates
LAQM	Local Air Quality Management
LEVI	Local Electric Vehicle Infrastructure
LCWIP	Local Cycling & Walking Infrastructure Plan
LGV	Light Goods Vehicle
LTN	Local Transport Note
NAQS	National Air Quality Strategy
NCN	National Cycle Network
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
NPPF	National Planning Policy Framework
PG22	Defra Policy Guidance 2022 for Local Authorities
PM	Airborne particulate matter
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

East Staffordshire Borough Council

SPD	Supplementary Planning Document
SWP	Staffordshire Waste Partnership
TG22	Defra Technical Guidance 2022 for Local Authorities
Zebra 2	Zero Emission Bus Regional Areas – Funding Scheme for transport authorities to bid for money to procure zero emission buses. Now in its second phase.