Blaby District Council **Strategy**

Blaby District Council Air Quality Action Plan 2025 - 2029

Original Publish Date	05/01/2026	**Review Frequency**	Every 3 Years	**Current Version Publish Date**	05/01/2026
Approved By*	Cabinet	**Approval Date***	20/11/2025	**Version Number**	001
Author Job Title	Environmental Services Team Leader	**Service Area**	Environmental Services	**Document Register Reference**	A1006

*Approved by and 'approval date' are in relation to the most recent version.

Review History			
Version*	Reviewed By (Job Title)	Review Completion Date	Brief Description of Changes (add 'no changes required' if applicable)

*Version number remains the same if no significant changes are made upon review.

Blaby District Council Air Quality Action Plan 2025 - 2029

In fulfilment of Part IV of the Environment Act 1995, as amended by the Environment Act 2021

Local Air Quality Management

December 2025

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Report Reference Number	AQAP 2025-2029
Date	November 2025

Version	Date	Reason for issue	Status
1.0	**01/07/2025**	**Draft for comment**	Draft
2.0	**20/11/2025**	**Final**	Final

Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of the Council's statutory duties required by the Local Air Quality Management framework. It outlines the actions the Council will take to improve air quality in the district between 2025-2029, setting out how the local authority will exercise it's functions to secure the achievement of the Air Quality Objectives.

This AQAP is a final version and has been adopted following acceptance by Defra. Implementation of the outlined measures will result in the relevant objectives being attained by 2029.

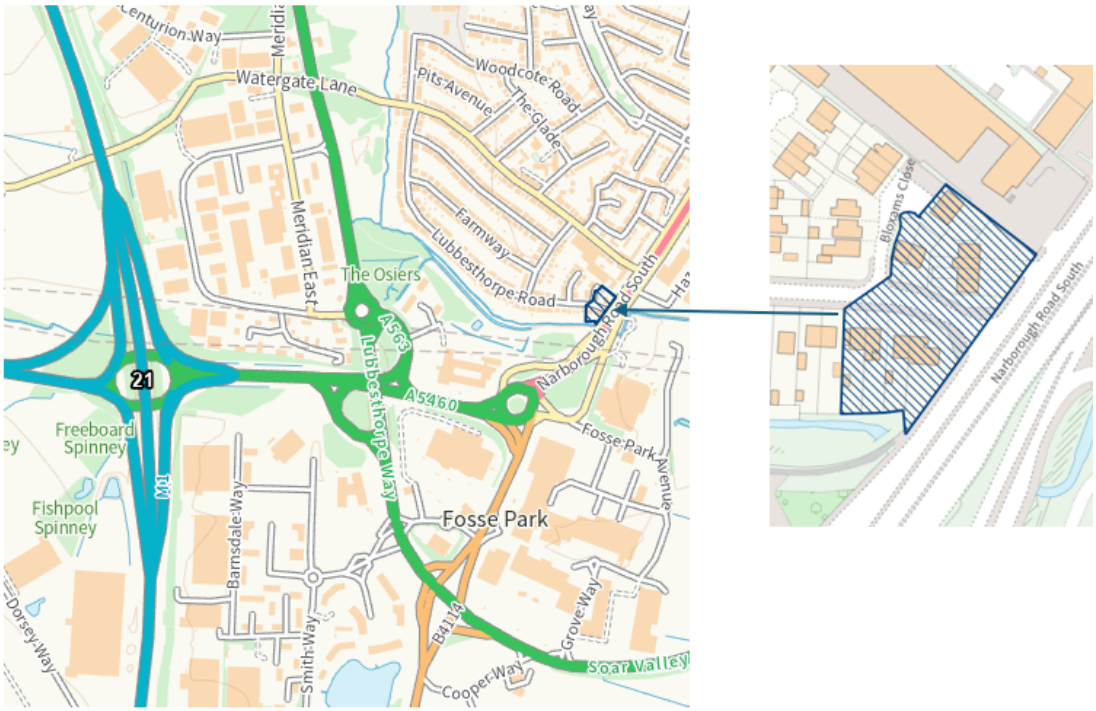
Part IV of the Environment Act 1995 (as Amended 2021) sets out the National Air Quality Objectives which should be considered as the maximum levels of air pollution to which people should be exposed. These objectives are:

- the *annual* average level of Nitrogen dioxide (NO_2) in a location should be no higher than 40µg/m^3, that is, 40 micrograms of NO_2 per cubic metre of air; and
- the *hourly* average level of Nitrogen dioxide (NO_2) in a location should be no higher than 200µg/m^3.

The relevant Air Quality Management Areas (AQMAs) addressed by this AQAP are outlined below, both of which are declared for exceedances of the NO_2 *annual* average Air Quality Objectives:

- AQMA 6: Mill Hill, Enderby:- A residential area located close to industrial sites linking the North-West area of the district to major road networks. The date of declaration for the NO_2 exceedance was 01/10/2018.The last exceedance was recorded in 2023.

- AQMA 7: Lubbesthorpe Road, Braunstone Town:- A residential area located close to major road networks. The AQMA was declared for an annual NO_2 exceedance on 04/11/2024.



This AQAP replaces the previous Action Plan which was adopted in 2021 for the period 2021-2025. Projects delivered and achievements made as a result of the past Action Plan include:

- The revocation of four AQMAs due to ongoing compliance with NO_2 Air Quality Objectives for 5 years or more:

  AQMA 1: A5460 Narborough Road South- Declared January 2001; Revoked November 2024.
  AQMA 2: M1 corridor in Enderby and Narborough- Declared January 2001; Revoked November 2024.
  AQMA 3: M1 corridor between Thorpe Astley and Leicester Forest East- Declared January 2001; Revoked November 2024.
  AQMA 4b: Enderby Road, Whetstone- Declared October 2005; Revoked November 2024.
- Promoting Travel Alternatives: The Health and Leisure Team at Blaby District Council worked hard to promote active travel across the district, and so reduce the emissions associated with car journeys. A new Active Travel Strategy was approved and published in 2024: Active Travel Strategy – Blaby District Council.
- Behavioural change project with businesses in vicinity of AQMA6: This involved Council Officers attending and delivering business breakfast sessions, hosted by Blaby District Council, to raise awareness on Air Quality and how businesses can make a positive difference through employee travel plans and incentives for green travel. This positive difference would extend to reduced emissions from vehicles.
- Behavioural change within schools: The Countdown to Clean Air project concluded in 2023, this involved educational sessions, assemblies and fun activities for children and parents to take part in to encourage active travel to and from schools. The aim was to reduce the impact of emissions associated with school traffic.
- Work was undertaken to develop a charging network across the district. Flex-D is a current project being run collaboratively with local authorities and Leicestershire County Council. The project will eventually see 63 Electric

Vehicle charging points installed across the county including a charging hub at Enderby Leisure Centre comprising of twelve 7kW Electric Vehicle charging points, due to be installed in 2026.

- Engaged with the taxi drivers to encourage the switch to Electric Vehicles*:* The Council approved The Hackney Carriage and Private Hire Licensing Policy for 2022 – 2027. The policy incentivises the use of Ultra Low Emission Vehicles (ULEV) and Electric Vehicles (EV). The Licensing Department offers reductions in the fees for operators and drivers who license a vehicle under either of these categories.
- Improved air quality information on the Blaby District Council website: The website was updated in 2025 and now has a link to a 'live portal' which enables residents and business to view local air quality in real time. This is part of the Particulates Matter project in conjunction with Public Health Leicestershire, of which more detail can be read in below in additional measures. The project is drawing to a close and so the future of the 'live portal' is under consideration.

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 less affluent[1,2].

The UK Health Security Agency (formally Public Health England) has estimated that the costs of air pollution in England to health and social care services could reach between £5.3 and £18.6 billion between 2018 and 2035 [3]. Blaby District Council is

[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] Public Health England. Estimation of costs to the NHS and social care due to the health impacts of air pollution: summary report, May 2018

committed to reducing the exposure of people in Blaby District to poor air quality in order to improve health.

The Council have developed actions that can be considered under six broad topics:

- Promoting the use of low/zero emission transport and supporting infrastructure
- Consistent application of Environmental Permitting and other regulatory measures
- Policy Guidance and Development Management
- Public Health and wellbeing education and behavioural change
- Reducing emissions from domestic heating, industry and services
- Air quality monitoring

In addition, the Council adopted a Climate Change Strategy in 2020 to cover six key themes:

- Reducing CO_2 emissions
- Protecting the environment and enhancing biodiversity
- Reducing waste and resource use and moving to a circular economy
- Support sustainable communities
- Behaviour changes and education
- De-carbonising travel and transport

This AQAP outlines how the Council plans to effectively tackle air quality issues within its control. However, it is recognised that there are many air quality policy areas that lie outside of local authority influence (such as vehicle emissions standards). Therefore, work will continue with other agencies and central government on policies and issues beyond the Council's direct influence.

Responsibilities and Commitment

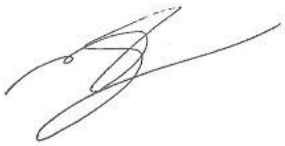
This AQAP was prepared by the Environmental Services Team of Blaby District Council with the support and agreement of the following officers and departments:

- Active Travel, Health and Leisure- Blaby District Council

- Communications, Consultation and Digital Services Team- Blaby District Council
- Economic & Community Development Team- Blaby District Council
- Environmental Health Team- Blaby District Council
- Information Technology & Transformation Team- Blaby District Council
- Licensing Team- Blaby District Council
- Neighbourhood Services and Assets Team- Blaby District Council
- Net Zero Programme Delivery Officer- Blaby District Council
- Parking Services- Blaby District Council
- Planning Teams- Blaby District Council

This AQAP has been approved by Caroline Harbour, the Group Manager for Environmental Health, Housing & Community Services (Environmental Services, Car Parking, HET & Lightbulb).

This AQAP has been signed off by a Director of Public Health at Leicestershire County Council.



Mike Sandys

Director of Public Health

The following Air Quality Partners / Stakeholders have contributed to the development of the draft AQAP and will be involved in delivery of the actions:

- Public Health - Leicestershire County Council
- Environment and Transportation - Leicestershire County Council
- Air Quality and Health Partnership- District Councils and Health bodies in Leicestershire

This AQAP has been subject to Blaby District Council Cabinet approval, and will be reviewed annually. Progress each year will be reported in the Annual Status Reports (ASRs) produced by Blaby District Council, as part of statutory Local Air Quality Management duties. The ASRs are available on the Council website: Air Quality – Blaby District Council

If you have any comments on this AQAP, please send them to the Environmental Services team at:

Address: Council Offices, Desford Road, Narborough, LE19 2EP

Telephone: 0116 275 0555

E-mail: environmental.services@blaby.gov.uk

Table of Contents

1 Introduction

This Air Quality Action Plan (AQAP) outlines the actions that Blaby District Council and it's partners will deliver between 2025-2029 to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting the health and quality of life of residents and visitors to the Blaby District area.

The purpose of this report is to set out how the Council will exercise it's functions to achieve the relevant Air Quality Objectives (AQOs).

It has been developed in recognition of the legal requirement on the local authority to achieve and maintain AQOs under Part IV of the Environment Act 1995, as amended by the Environment Act 2021, and to meet the requirements of the Local Air Quality Management (LAQM) statutory process.

This AQAP will be subject to an annual review. Progress will be reported in the Annual Status Report (ASR) produced by the Council as part of statutory LAQM duties. This Action Plan will be revised every five years.

This document is the final version, following consultation internally and externally in line with LAQM PG (22) guidance.

2 Summary of the Current Air Quality in Blaby District Council Air Quality Management Areas

The main air pollutants of concern in Blaby District, as in most areas of the UK, are associated with road traffic, in particular Nitrogen dioxide (NO_2) and fine Particulate Matter (PM) at locations close to busy, congested roads where people may live or work. Other sources include domestic fuel burning, industrial processes and agriculture. Part IV of the Environment Act 1995 requires the Secretary of State to publish a National Air Quality Strategy which requires local authorities to assess air quality through a set of National Objectives as a statutory duty. These are set out via the LAQM framework.

The LAQM targets are as follows[4]:

- Nitrogen dioxide (NO_2) not to exceed an *annual* mean of 40µg/m^3 *o*r an *hourly* average level of Nitrogen dioxide (NO_2) in a location not to exceed 200µg/m^3.
- Particulate Matter (PM): PM_{10} not to exceed an *annual* mean of 40µg/m^3. $PM_{2.5}$ not to exceed an *annual* mean of 20µg/m^3.

The LAQM process places an obligation on the local authority to regularly assess and review air quality, and to determine if the AQOs are likely to be achieved. The Council uses Air Quality Monitoring Stations (AQMSs), also known as Continuous Monitors (CM), and Diffusion Tubes to assess if AQOs have been met across the district. The Council has four AQMSs in total, measuring NO_2. Two of these also monitor Particulate Matter (PM). There are 28 Diffusion Tubes that measure NO_2 across the district which are exchanged monthly and sent off to an independent laboratory for analysis. Maps illustrating the locations of all of the air quality monitoring sites, can be viewed in 2.1, 2.2 and Appendix C.

When an exceedance of the AQO occurs, the local authority must declare an Air Quality Management Area (AQMA).

[4] Air_Quality_Objectives_Update_20230403.pdf

In the district there are currently two AQMAs, both of which were declared for exceedances of the annual mean NO_2 AQO:

- AQMA 6: Mill Hill, Enderby
- AQMA 7: Lubbesthorpe Road, Braunstone Town

Link to Blaby District Council website: Air Quality

The trend for the past five years is encouraging, and air pollutant concentrations experienced an overall decrease across the district. This improvement over time has seen four out the five previously declared AQMAs remain compliant with the AQOs for five or more years. This has enabled the Council, with approval from Defra, to revoke the following AQMAs:

AQMA 1: A5460 Narborough Road South- revoked November 2024
AQMA 2: M1 corridor in Enderby and Narborough- revoked November 2024
AQMA 3: M1 corridor between Thorpe Astley and Leicester Forest East- revoked November 2024
AQMA 4b: Enderby Road, Whetstone- revoked November 2024

Blaby District is crossed by 2 motorways (the M1 and M69) and the A5 runs along its southern boundary, all of which are part of the Strategic Road Network (SRN), and the responsibility of National Highways. The other public roads, including other A roads, are the Local Road Network (LRN) and are the responsibility of Leicestershire County Council.
The SRN is not currently a major direct contributor of NO_2 at the point of relevant exposure, primarily due to the separation distances to residential receptors resulting in NO_2 falloff (this is reflected in Table 1 below). However, it can have an impact on background pollution levels and behavioural actions using local roads when the SRN becomes congested and or blocked. Queuing traffic is particularly relevant at AQMA 6 when the SRN becomes congested.

Whilst it is important to consider the SRN, the AQAP measures presented in this report are intended to be targeted towards the predominant sources of emissions within the Council's local area, focusing on the LRN.

Table 1: Relevant Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality within the AQMA influenced by National Highways roads?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective
AQMA 6- Mill Hill, Enderby	Declared 2018	Nitrogen dioxide annual average	Residential properties along Hall Walk and Mill Hill, Enderby	No	43 µg/m^3 (Annual average exceedance during 2016)	35.6 µg/m^3	1
AQMA 7- Lubbesthorpe Road, Braunstone Town	Declared 2024	Nitrogen dioxide annual average	Residential properties on and near to Lubbesthorpe Road, Braunstone Town	No	43 µg/m^3 (Annual average exceedance during 2022)	36 µg/m^3	2

Notes:

There was a delay in the 2023 ASR being accepted, which caused a delay in the declaration of AQMA 7. The initial exceedance was during 2022, yet this was not formally declared until 2024. Data from 2023 and 2024 do not show an annual average exceedance and therefore, there have been 2 years of compliance effectively.

2.1 AQMA 6 – Mill Hill, Enderby

AQMA 6 is located in a high-volume traffic area, located on a through road that links New Lubbesthorpe, Enderby Industrial Estates and the Parishes to the road networks in the west of Blaby District. Traffic often queues along the AQMA due to light sequencing and a busy crossroads which is made worse due to the historic nature of the road. It is narrow in places and was not originally built for the large traffic volumes it carries. It also has a high wall (to a historic house) on one side which makes dispersion of pollutants in the air more difficult (known as a canyon-effect). The former industrial nature of Enderby means that dwellings sit in close proximity to the roadside and represent sensitive receptors with regards to air pollution exposure.

Figure 1: Maps illustrating AQMA 6- Mill Hill in Enderby

The blue hatched box indicates the AQMA.

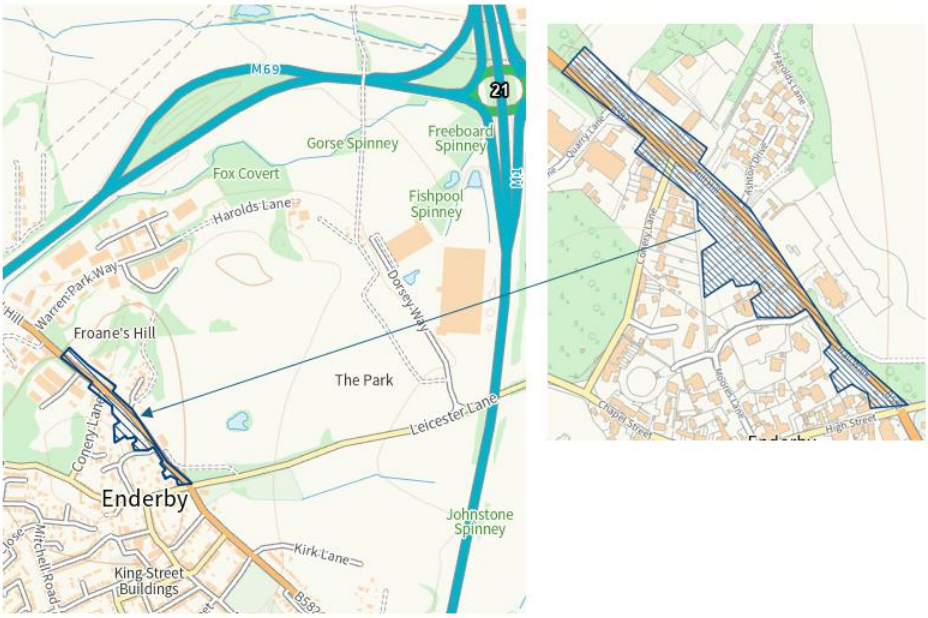
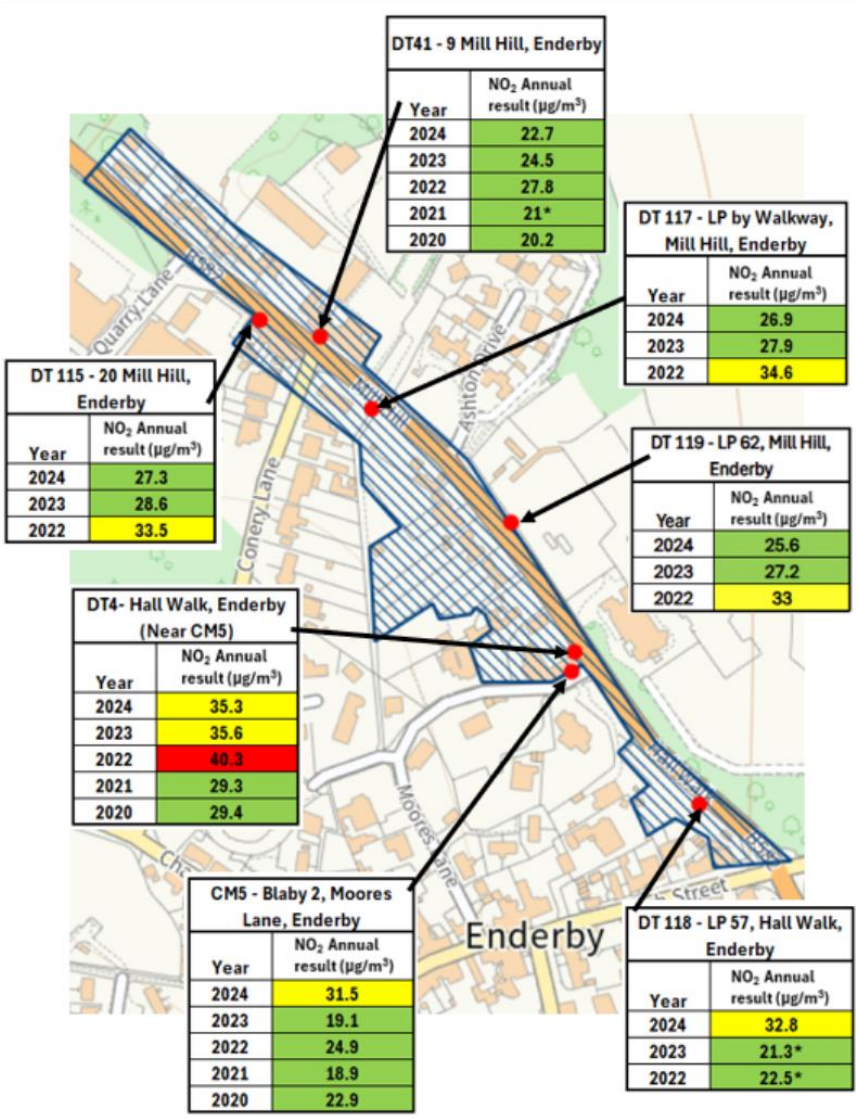


Figure 2: Close up map illustrating extent of AQMA 6- Mill Hill in Enderby



The blue hatched box indicates the AQMA. The red dots indicate CM5 and Diffusion Tube locations, annual averages of each are included in the adjoining tables. 40µg/m^3 is the National Air Quality Objective for NO_2, Diffusion Tube results should be compared against 36µg/m^3 to take account of the accuracy of this monitoring technique. Numbers with a * represent a figure that has been annualised and / or distance corrected.

In 2024, there were six Diffusion Tube sites within AQMA 6 and one CM. Although levels of NO_2 are below the AQOs, it remains an area of concern due to existing and planned developments in the area and requires close monitoring. The last exceedance at the AQMA was in 2023 where an annual average of one of the Diffusion Tubes in the area was recorded at 40.3 µg/m^3. The locations of these monitoring sites are also illustrated in Appendix C.

The AQMA will remain in place as advised by Defra and this AQAP will formulate actions to continue to tackle the issues in this area and the district as a whole.

Table 2: AQMA 6 Annual Mean NO_2 Concentrations

Site Name	Monitoring type	Site Type	X OS Grid Ref	Y OS Grid Ref	Annual mean NO_2 concentration (µg/m^3)				
					2020	2021	2022	2023	2024
CM5, Moores Lane, Mill Hill, Enderby	Automatic Monitor	Roadside	453594	299549	22.9	18.9	24.9	19.1	31.5
Hall Walk, Enderby (near CM5)	Diffusion Tube	Roadside	453605	299564	29.4	29.3	**40.3**	35.6	35.3
9 Mill Hill, Enderby	Diffusion Tube	Roadside	453467	299735	20.2	21	27.8	24.5	22.7
20 Mill Hill, Enderby	Diffusion Tube	Roadside	453435	299743	/	/	33.5	28.6	27.3
LP by walkway, Mill Hill, Enderby	Diffusion Tube	Roadside	453495	299696	/	/	34.6	27.9	26.9
LP 57, Hall Walk, Enderby	Diffusion Tube	Roadside	453673	299481	/	/	**43**	**40.3**	32.8
LP 62, Mill Hill, Enderby	Diffusion Tube	Roadside	453571	299634	/	/	33.0	27.2	25.6

Exceedances of the NO_2 annual mean Objective of 40µg/m^3 are shown in **bold**.
Due to accuracy of method, Diffusion Tubes are considered compliant where results are below 36µg/m^3.

2.2 AQMA 7- Lubbesthorpe Road, Braunstone Town

In 2022, an exceedance of the AQOs was recorded around the junction of Lubbesthorpe Road and Narborough Road South in Braunstone Town. The exceedance was for NO_2 with a measurement of 43 µg/m^3* (*distance corrected), which reduced to 35.7µg/m^3* in 2023. There was a delay in the approval of the 2023 ASR, which led to a delay in the official declaration of the AQMA. In November 2024, this area was declared as an AQMA and is known as AQMA 7- Lubbesthorpe Road, Braunstone Town. Lubbesthorpe Road area is relatively close to a major junction of the SRN where the M1 and M69 meet, and with junctions of the LRN. The junction

affects inter-urban travel and has a high occurrence of accidents which often leads to road closures and congestion which has a huge impact on the LRN in the district.

In 2024, there were three Diffusion Tubes and one CM measuring NO_2 levels in AQMA 7. The last exceedance of the AQO was recorded in 2022, after which time the figures have continued to improve. In 2024, the CM recorded levels had decreased to 29.7µg/m^3, which is a reduction of 13.3 µg/m^3 of the annual mean.

Figure 3: Map illustrating AQMA 7-Lubbesthorpe Road, Braunstone Town

The blue hatched box indicates the AQMA.

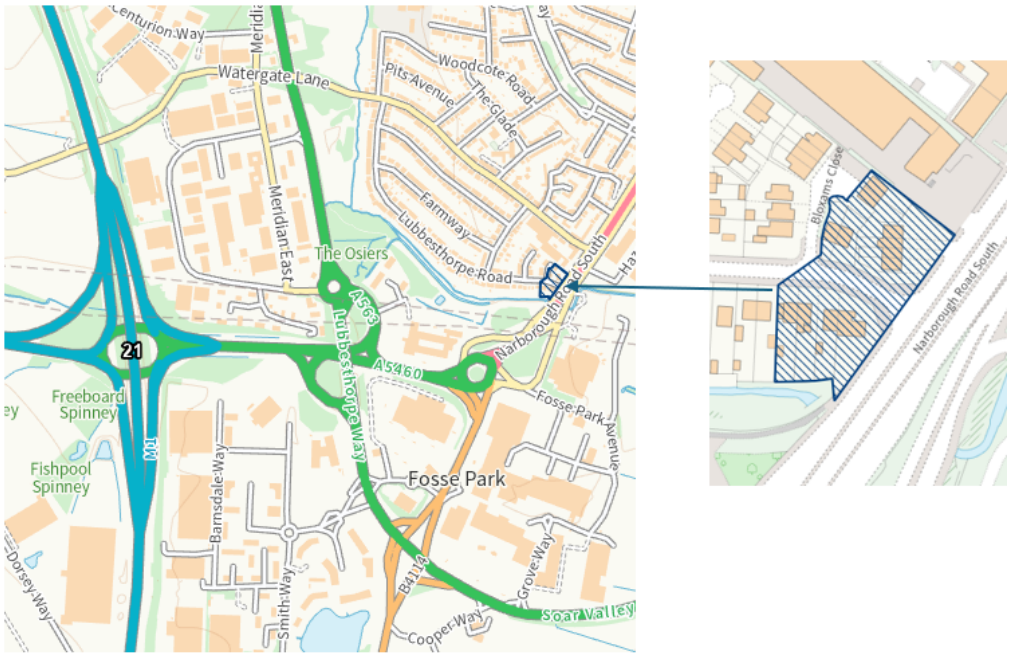
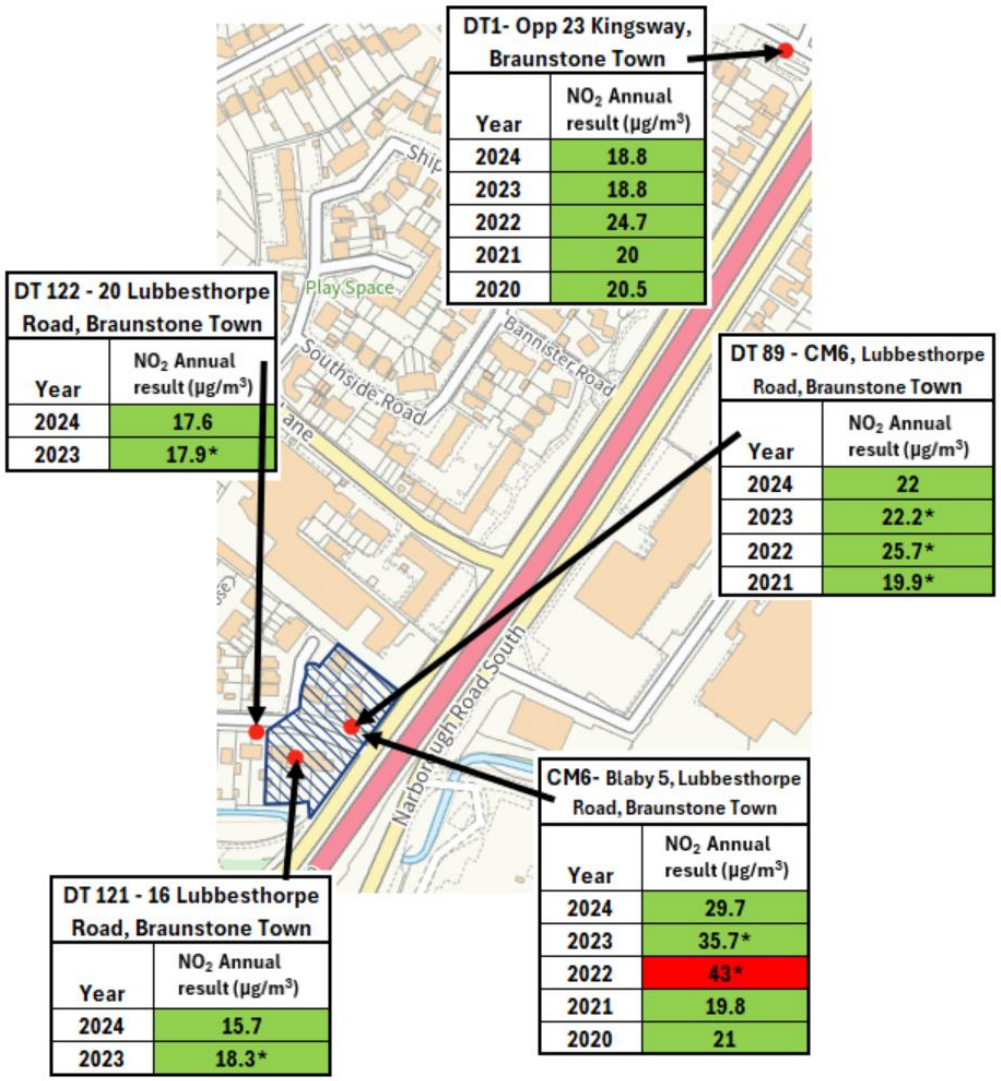


Figure 4: Close up map illustrating extent of AQMA 7 - Lubbesthorpe Road, Braunstone Town



The blue hatched box indicates the AQMA. The red dots indicate CM6 and Diffusion Tube locations, annual averages of each are included in the adjoining tables. 40µg/m^3 is the National Air Quality Objective for NO_2, Diffusion Tube results should be compared against 36µg/m^3 to account for the accuracy of this monitoring technique. Numbers with a * represent a figure that has been annualised and / or distance corrected.

Table 3: AQMA 7- Annual Mean NO_2 Concentrations

Site Name	Monitoring Type	Site Type	X OS Grid Ref	Y OS Grid Ref	Annual mean NO_2 concentration ($\mu g/m^3$)				
					2020	2021	2022	2023	2024
CM6, Lubbesthorpe Road	Automatic Monitor	Roadside	455722	300782	21	19.8	**43***	**35.7***	29.7
On CM6 Lubbesthorpe Road, Braunstone Town	Diffusion Tube	Roadside	455732	300762	/	19.9	25.7	22.2	22
16 Lubbesthorpe Road, Braunstone Town	Diffusion Tube	Roadside	455702	300762	/	/	/	18.3	15.7
20 Lubbesthorpe Road, Braunstone Town	Diffusion Tube	Roadside	455681	300776	/	/	/	17.9	17.6

*These figures have been distance corrected for relevant exposure.

Exceedances of the NO_2 annual mean Objective of 40µg/m^3 are shown in **bold**. Due to accuracy of method, Diffusion Tubes are considered compliant when results are below 36µg/m^3.

2.3 Additional Monitoring in the Blaby District

Blaby District Council has made an ongoing commitment to continue the monitoring and management of air quality throughout the district, to check compliance with the AQOs and that the current trend of improving air quality continues.

In 2022 and 2023, the Council successfully applied for air quality funding of 2 projects: Countdown to Clean Air and Particulates Matter. Additional 'low-cost' monitors were purchased as part of those projects, including a type called Zephyrs®. Although not currently an approved Reference Method, Zephyrs®, and so data from them, is indicative and should not be compared to AQOs to assess compliance. However they can be used to assess general trends and allow hotspot areas to be highlighted for further investigation. They record real time data for NO_2 and PM and are easy to move around. Thirteen of the Zephyrs® were installed in fixed locations in 2024. Two additional Zephyrs® are mobile and regularly moved around the district to investigate different locations. This monitoring is undertaken in conjunction with approved Reference Methods. The results for both NO_2 and PM monitoring to date do not indicate exceedance of current annual AQOs or highlight any areas of concern, as shown in Table 4 below.

Table 4: Zephyr® Monitoring results for Annual Mean NO_2

ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Annual mean NO_2 concentration (µg/m3)		
					2022	2023	2024
945	Narborough Rd South	Suburban	466102	301332	36.3	26.4	26.3
951	Leisure Centre, Enderby	Roadside	453942	298941	14.1	11.4	10.3
966	Playing Fields, Stoney Stanton	Rural	448856	294497	/	10.6	10.3
967	Pumping Station, Huncote	Roadside	451513	297318	/	15.9	17.0
970	Croft Quarry 1, Croft	Industrial	451509	296215	/	17.1	12.3
1020*	Croft Rec, Croft	Industrial	451760	295783	/	15.6	16.1
1020*	Sharnford School	Other	448098	292190	/	/	19.5
1045	Croft Quarry 2	Industrial	451435	296019	/	/	13.9
1046	Alyssum Way, Narborough	Roadside	452881	298059	17.0	14.8	16.0
1049	Osiers Nature Reserve, Braunstone	Other	455543	300718	/	/	23.8
1283	Stelle Way, Glenfield	Other	454709	306981	/	/	23.0
1324	Brierfield Road, Cosby	Roadside	454809	294565	/	18.6	15.9
1432	Hinckley Road, L.F.E	Roadside	452555	303013	/	21.7	21.6
1484	Mill Hill, Enderby	Roadside	453509	299687	/	27.4	31.9

*Where there are two results showing for Zephyr ID number 1020, the unit was moved within the year, and the results reflect the annual mean for the time in situ. The data has not been annualised and represents an average for the monitoring period.

Table 5: Zephyr® Monitoring results for Annual Mean $PM_{2.5}$

ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Annual mean $PM_{2.5}$ concentration (µg/m3)		
					2022	2023	2024
945	Narborough Rd South	Suburban	466102	301332	9.2	8.3	7.8
951	Leisure Centre, Enderby	Roadside	453942	298941	7.5	6.6	6.4
966	Playing Fields, Stoney Stanton	Rural	448856	294497	/	7.4	9.4
967	Pumping Station, Huncote	Roadside	451513	297318	/	6.2	6.1
970	Croft Quarry 1, Croft	Industrial	451509	296215	/	7.0	7.1
1020	Croft Rec, Croft	Industrial	451760	295783	/	3.4	4.4
1020	Sharnford School	Other	448098	292190	/	/	5.2
1045	Croft Quarry 2	Industrial	451435	296019	/	/	7.2
1046	Alyssum Way, Narborough	Roadside	452881	298059	7.7	8.2	5.7
1049	Osiers Nature Reserve, Braunstone	Other	455543	300718	/	/	4.1
1283	Stelle Way, Glenfield	Other	454709	306981	/	/	5.9
1324	Brierfield Road, Cosby	Roadside	454809	294565	/	6.1	6.1
1432	Hinckley Road, L.F.E	Roadside	452555	303013	/	6.1	2.6

1484	Mill Hill, Enderby	Roadside	453509	299687	/	5.6	5.6

*Where there are two results showing for Zephyr ID number 1020, the unit was moved within the year, and the results reflect the annual mean for the time in situ at each location. The data has not been annualised and represents an average for the monitoring period.

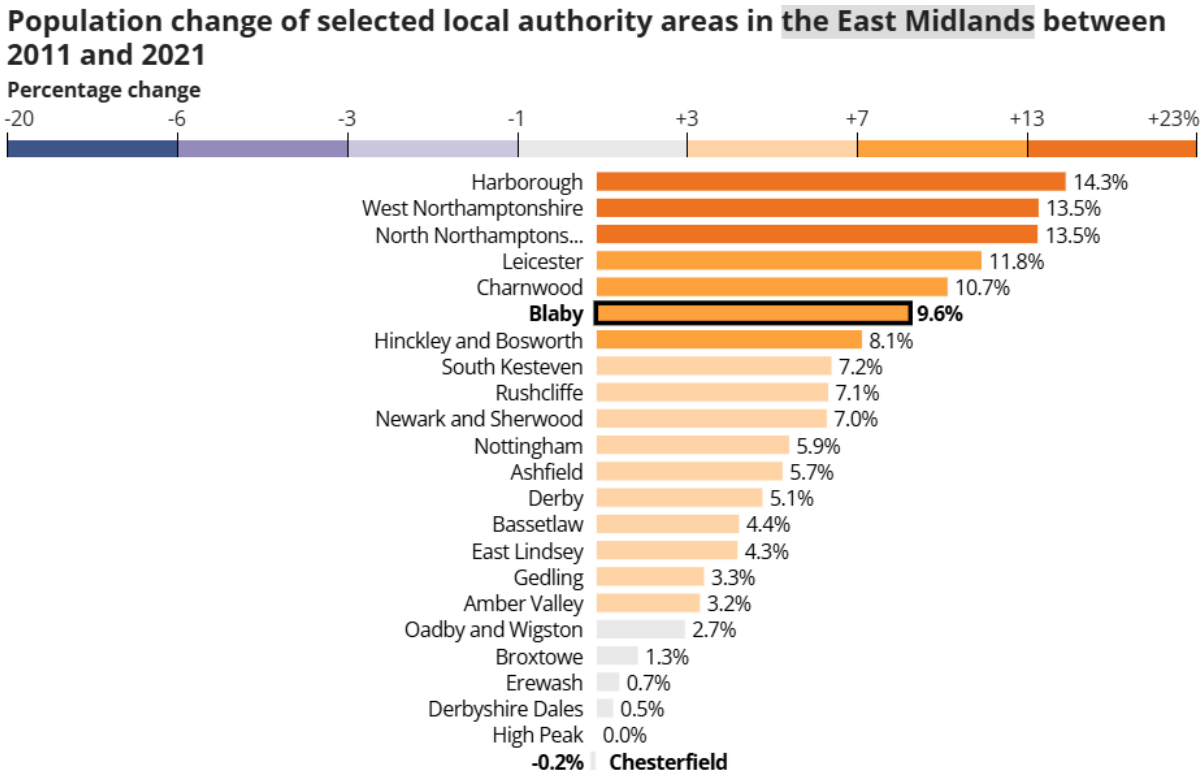
2.4 Public Exposure

In Blaby District, the population size was recorded at 102,900 in 2021[5] and is estimated to be 105,278 in 2023[6]. During the last census period, the population of England and Wales grew by around 6.3% according to the Office for National Statistics (ONS). The population in the district grew by more than the national average and increased by 9.6%.

[5] Blaby population change, Census 2021 – ONS

[6] Population - 2023 Mid-year estimates for Local Authorities | Tableau Public

Figure 5: Population change in Blaby 2011 to 2021[7]

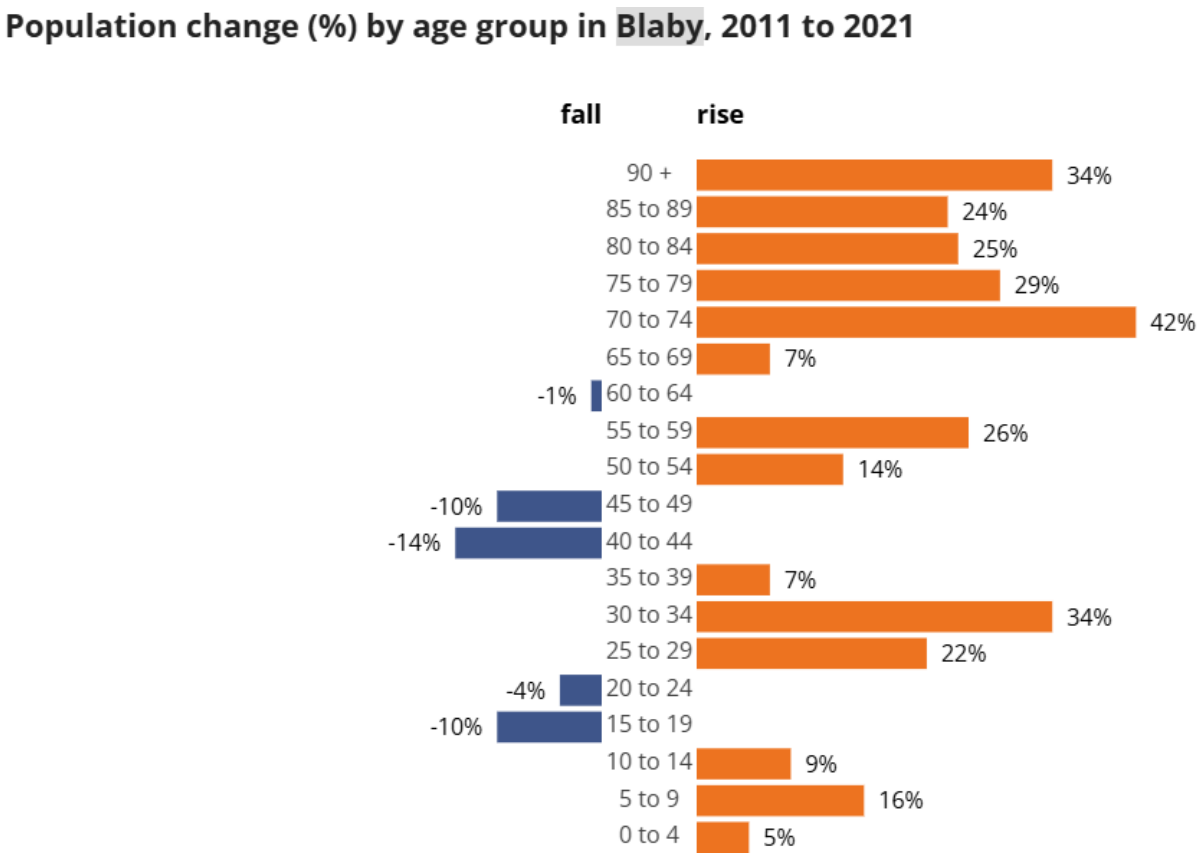


The local population is generally older than the national average with a higher growth experienced in older age groups due to the post war population boom. There has been an increase of 25% in people aged 65 and over[8]. This demographic shift towards an older population increases susceptibility to the health impacts of poor air quality. Older adults are particularly vulnerable to respiratory and cardiovascular conditions linked to air pollution, which highlights the need for targeted interventions to protect those most at risk.

[7] Home - Office for National Statistics

[8] Blaby population change, Census 2021 – ONS

Figure 6: Population change (%) by age group in Blaby District[9]



In order to understand the population that is exposed to poor air quality, a review of the estimated population of each AQMA has been undertaken. This has been done using the ONSs 'Lower Super Output Area' (LSOA) database[10].

AQMA 6, Mill Hill Enderby covers approximately 40 residential properties, which is estimated to have an approximate population of 92 residents.

AQMA 7, Lubbesthorpe Road Braunstone Town is a small area comprising of 12 properties with an estimated population of 28 residents.

[9] Home - Office for National Statistics

[10] - Office for National Statistics

3 Blaby District Council's Air Quality Priorities

3.1 Public Health Context

Poor air quality represents the largest environmental risk to public health. Long-term exposure to air pollution can cause chronic conditions such as cardiovascular and respiratory diseases as well as lung cancer, leading to reduced life expectancy. According to Public Health England[11], it is estimated that long-term exposure to man-made air pollution in the UK has an annual effect equivalent to between 28,000-36,000 deaths.

Research shows that the most common pollutants of concern are NO_2 and PM. NO_2 is a gas that is produced from combustion processes. Defra estimates that the most common condition associated with NO_2 is thought to be asthma. Between 2007-2017, there was an increase of 25% in annual asthma deaths in the UK[12].

In 2013, a nine-year-old child died following an asthma attack in the London Borough of Lewisham. The girl, Ella Adoo-Debrah, lived in close proximity to a main road, and had been admitted to hospital 27 times in the three years prior to her death. An inquest in 2020 ruled that the girl had been exposed to excessive levels of pollution, that there had been a recognised failure to reduce the levels of NO_2 and that the lack of information provided to her mother possibly contributed to her death. This was the first case in the UK to have ruled air pollution as the cause of death (Coroner of Inner South London, 2021)[13].

The other main pollutant of concern, PM, is thought to cause a wider range of conditions such as coronary heart disease, stroke and cancers. PM is a term used to describe a mix of solid and liquid particles of different size, shape and make-up. The main sources of man-made PM is caused by the combustion of fuels and brake and tyre wear. In addition, there are also natural sources of PM, which include wind-

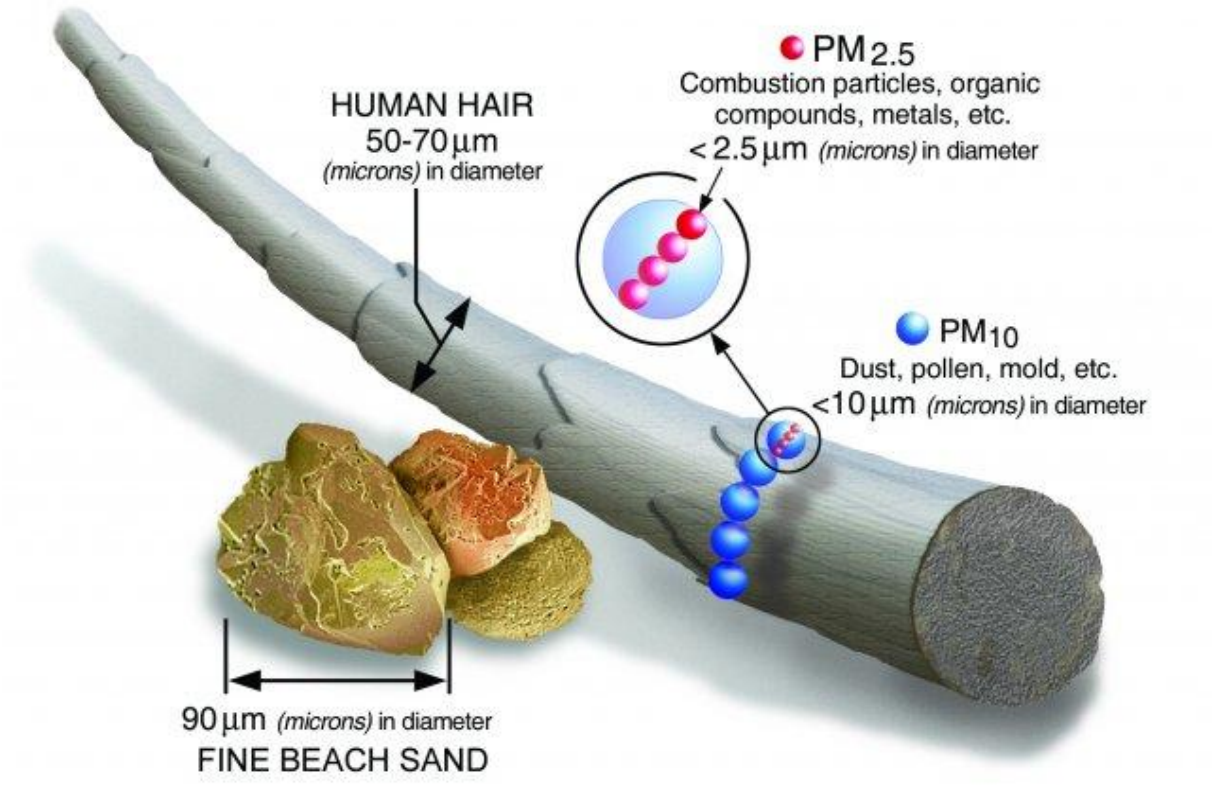
[11] Health matters_ air pollution - GOV.UK

[12] www.asthmaandlung.org.uk

[13] Committee on the Medical Effects of Air Pollutants (COMEAP): 2023 Annual Report

blown dust and soil, spray from the sea and fires that involve the burning of vegetation. There are different sizes of PM, but it is considered that $PM_{2.5}$ (fine particles) have the strongest evidence for adverse effects on health. Public Health England predicted that a reduction in fine Particulate Matter of just 1µg/m^3 could prevent around 50,900 cases of coronary heart disease, 16,500 stokes, 9,300 cases of asthma and 4,200 cases of lung cancer[14].

Figure 7: Size Comparisons for Particulate Matter (PM)[15]

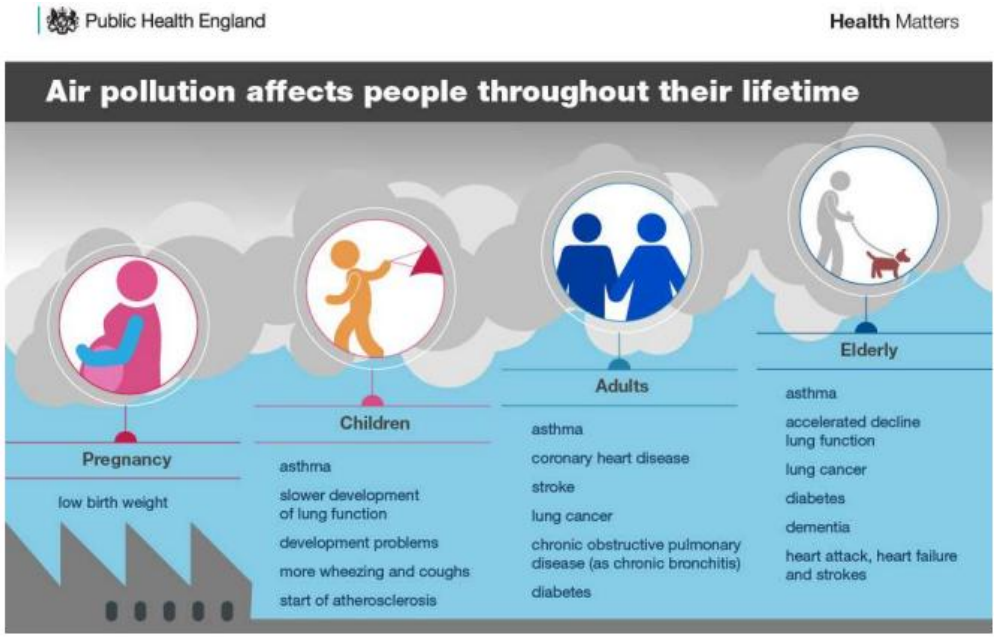


Air pollution can be harmful to anyone, but some people are more impacted as a result of where they live, or their vulnerability to health problems caused by air pollution. This can include groups such as children, pregnant women, older adults and those with pre-existing health conditions:

[14] Health matters air pollution - GOV.UK

[15] Particulate Matter (PM) Basics | US EPA

Figure 8: How Air pollution affects people throughout their lifetime[16]



It is also important to consider when implementing measures to improve air quality, whether they could put low-income residents at an increased disadvantage as they may be less able to take individual action to reduce their exposure to air pollutants.

Some examples of this are as follows[17]:

Employment and Travel- Some workers may not be able to choose to work from home or be able to travel at non- peak times to avoid congestion. Those living on lower incomes are less likely to have choice over their transport options and therefore less capacity to change how they travel.

Fuel-Poverty- Those living in fuel poverty are less likely to choose environmentally friendly options if those incur significant additional cost.

[16] Health matters air pollution - GOV.UK

[17] LAQM-Policy-Guidance-2022.pdf

Schools- People living on lower incomes are less likely to be able to choose where their children attend school and consequently the air pollution that they are exposed to.

It is therefore important to consider methods of communication and to think about how to reach all groups, including those most vulnerable.

This action plan aims to align with the priorities identified in the Leicestershire Joint Strategic Needs Assessment and the Health and Wellbeing Strategy to ensure air quality interventions contribute to reducing health inequalities and improving population health.

3.2 Planning and Policy Context

This AQAP outlines the Council's plan of actions to effectively tackle air quality issues that are within it's control. This section provides an outline of the strategies and policies that have the most potential to impact upon pollutant concentrations.

3.2.1 Local Plan

A Local Plan is a document that outlines policies and proposals for future development in a specific area, such as Blaby District. It covers aspects such as housing, shops, employment and provides guidelines on where developments should take place and areas where it should be restricted.

Blaby District Council is currently in the process of preparing a new Local Plan taking account of the changes made to the National Planning Policy Framework (NPPF). The new Plan will include compulsory housing targets and revised policies. The next version (Regulation 19 version) is the final draft and is expected to be approved for consultation in April 2026. There is a prescribed legal process that the Local Plan has to go through before it's adoption. This includes Examination In Public by an independent inspector appointed by the Planning Inspectorate. A Strategic Air Quality Assessment is currently being undertaken of the potential impacts of the emerging plan, the results of which will be fed into the Local Plan, and will be relevant to this AQAP.

3.2.2 Leicestershire's Local Transport Plan 2026- 2040

The Local Transport Plan (LTP)[18] is a statutory requirement of the Local Transport Act 2008. It is developed by Leicestershire County Council and sets out how transport can continue to play an important part in Leicestershire's success. It is on its fourth version (LTP4), which was adopted in November 2024. It sets out Leicestershire's vision for delivering integrated transport at a local level up until 2040.

One of the key points of LTP4 is the impact that transport has on air quality. Between 2005 and 2019, the emissions share generated by transport within Leicestershire grew from 24% to 35%. A significant contributor to air pollution is considered to be Heavy Goods Vehicles (HGV's), and that there will be an estimated 30% increase in freight demand across the county up to 2043.

Some of the transport demands can be met by investing county wide in the Electric Vehicle (EV) charging infrastructure. It is expected that the demand for EV's will grow from 13,100 cars in 2023 up to 415,800 in 2040, which in turn could reduce emissions by 29%. However, HGV's pose a bigger problem as electric power is not currently a viable fuel for large vehicles. LTP4 is looking at ways to support alternative fuel options which will help to reduce the impact on air quality from these larger vehicle types.

The delivery of LTP4 is split into three phases with Phase 1 covering 2025-2030. This initial phase of the Transport Plan will focus on identifying challenges facing transport in Leicestershire. Specific measures will be introduced in later phases of the LTP4. The policy recognises that transport is one of the largest contributors to poor air quality.

[18] A Local Transport Plan for Leicestershire - Core Document 2026 - 2040

3.2.3 Active Travel Strategy 2024-2034

The Blaby District Council Active Travel Strategy (ATS)[19] focuses on actions that aim to increase the provision of infrastructure to encourage and promote the usage of non-motorized transport options such as walking and cycling. The ATS links to the Local Cycling and Walking Infrastructure Plan (LCWIP), which is a blueprint that outlines the methodology for identifying improvements to cycling and walking infrastructure at the local level. The goal of the strategy is: *"… to make transportation more accessible, lower carbon emissions, improve air quality, promote Active Travel options like cycling and walking, enhance road safety and maintain our transport assets".*

3.2.4 National legislation: Zero Emission Vehicle mandate

The UK government and devolved administrations are taking action to meet Net Zero targets, specifically regarding speeding up the decarbonisation of road transport. Legislation and national targets for zero emission vehicles are determined at the national level, with local authorities responsible for implementing supporting measures within this framework. The UK is committed to ensure that all new cars and vans should be zero emissions from the year 2035. The Zero Emission Vehicle (ZEV) mandate[20] is the most ambitious regulation of its kind in any country and sets out a clear pathway to achieve the ending of the sale of non-ZEV cars and vans. This should help reduce pollution from NO_x in some areas, although it is noted that this does not include HGV's.

3.2.5 Climate Change

The Blaby District Council Net Zero Action Plan was adopted in December 2023 and sets out the Council's strategy for achieving Net Zero for its own operational emissions by 2030. The Action Plan sets out 50 completed, current and future Net Zero actions undertaken or potentially undertaken by the Council. A number of these

[19] Blaby District Council Active Travel Strategy

[20] Zero emission vehicle (ZEV) mandate consultation: summary of responses and joint government response - GOV.UK

projects are directly linked to air quality and will be actioned in conjunction with air quality initiatives or will contribute to achieving AQOs. In particular, the Flex-D EV charging points project and 'Let's Go Electric' Defra funded project to purchase an electric road sweeper, and an electric refuse collection vehicle (eRVC) conversion kit are included in the air quality measures below.

The Council has also adopted a Climate Change Strategy 2020-2030. Whilst this strategy covers the Council's own operations, it also focusses on where the Council can influence a reduction across the district. There are six key overarching aims of the strategy: reducing CO_2 emissions, protecting the environment, travel and transport, waste and resources, sustainable communities and behaviour change and education. Travel and transport and behaviour change and education are the two aims which overlap most closely to proposed air quality measures. Therefore, these will provide the best opportunities for collaboration with the Net Zero Programme Delivery Officer.

3.3 Source Apportionment

Source apportionment is the gathering of information about the origin of a pollutant and the amount it contributes to ambient air pollution levels.

Due to the close proximity of the declared AQMAs to high-volume traffic areas and having major roads within the district, a source apportionment exercise focussed on traffic emissions was undertaken in May 2025. Traffic data was collected by Blaby District Council Officers and NO_x contribution determined using the Defra Emission Factor Toolkit v13.1. The traffic counts conducted at AQMA 6 captured vehicle numbers along Hall Walk (passing Moores Lane). Similarly, at AQMA 7, traffic counts captured vehicle totals along Narborough Road South (passing Lubbesthorpe Road) and along Lubbesthorpe Road.

Using the EFT traffic output and data from the Defra background maps (Local Authority: Blaby, Region: Midlands, Pollutant: NO_x and NO_2, Year: 2024), a source apportionment for the worst-case NO_2 was conducted for each AQMA. This follows the guidance from Chapter 7 (Box 7-5) of LAQM TG22. Further information on the methodology used for the source apportionment can be found in Appendix D.

Table 6: Source apportionment for NO_2 - May 2025

AQMA	Highest Measured Annual Mean NO_2	Regional and Local background NO_2	Local Traffic						
			Petrol Car	Diesel Car	Diesel LGV	HGVs	Buses	Coaches	Motorcycles
AQMA 6 - Mill Hill, Enderby	35.3	3.46 (9.82%) 6.68 (18.92%)	1.76 (4.99%)	8.83 (25.01%)	5.33 (15.11%)	3.85 (10.90%)	3.75 (10.62%)	1.61 (4.56%)	0.03 (0.07%)
AQMA 7 - Lubbesthorpe Road, Braunstone Town	29.7	3.43 (11.56%) 9.39 (31.60%)	1.55 (5.23%)	7.78 (26.20%)	4.69 (15.80%)	1.16 (3.92%)	1.15 (3.86%)	0.51 (1.71%)	0.03 (0.11%)

Detailed information and supporting calculations for the source apportionment can be found in Appendix D.

Figure 9: Source Apportionment of NO_2, AQMA 6: Mill Hill

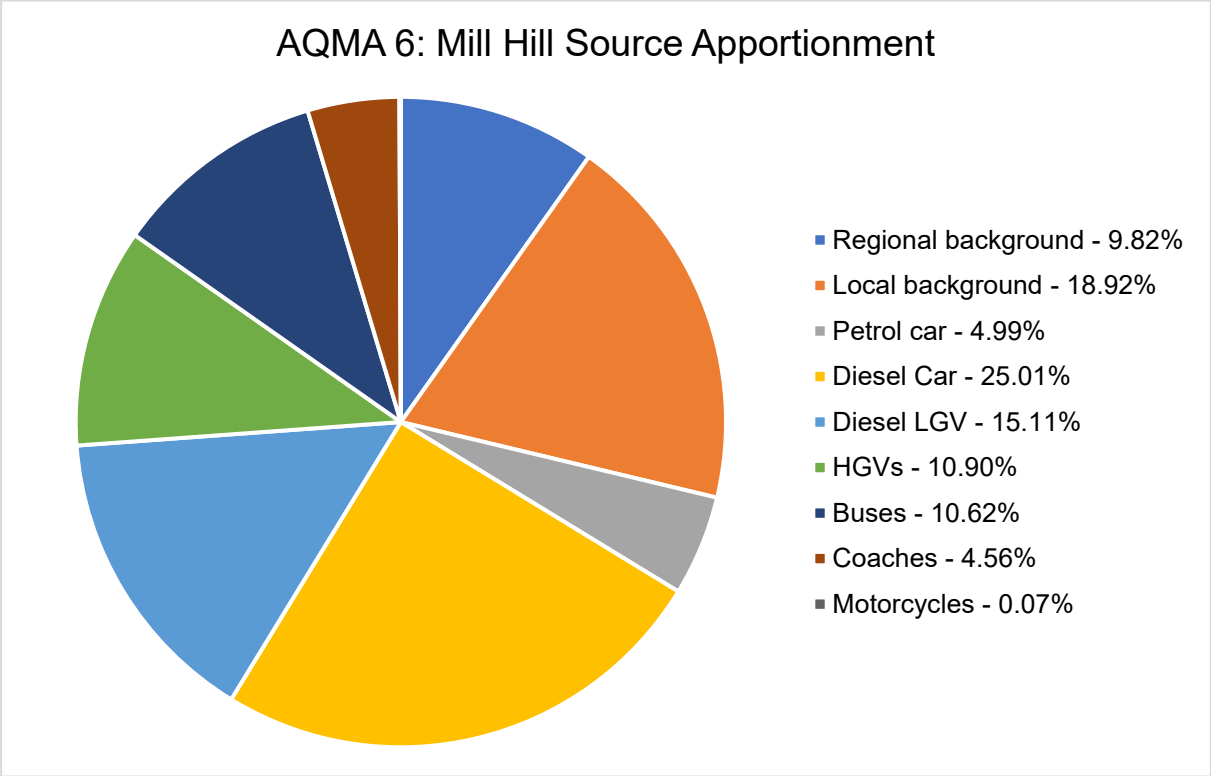
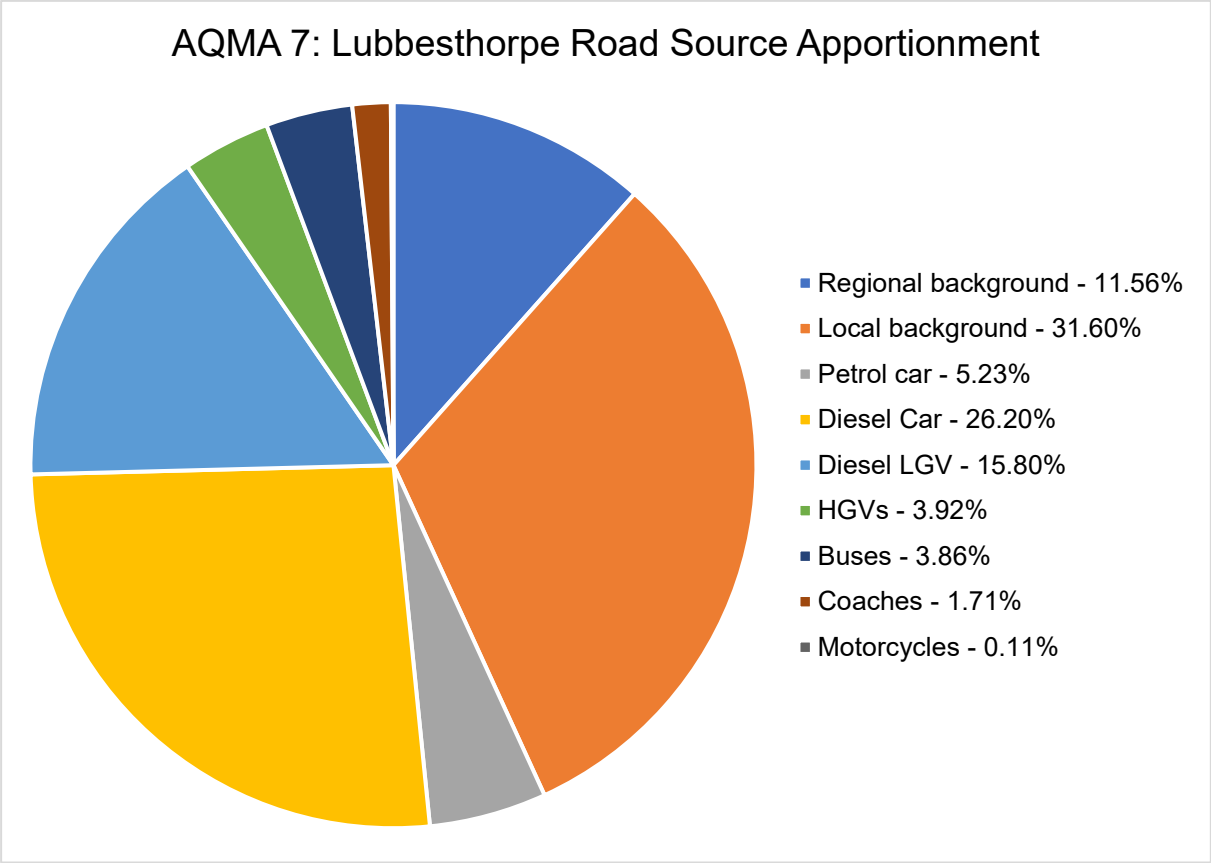


Figure 10: Source Apportionment of NO_2, AQMA 7: Lubbesthorpe Road



As can be seen in Figures 9 and 10, over a quarter of NO_2 emissions at AQMA 6 and almost half of emissions at AQMA 7 can be attributed to background sources, which the Council is unable to influence directly.

However, diesel vehicles, both cars and LGVs, also contribute significantly to NO_2 pollution, collectively accounting for over 40% of total NO_2 at both locations. The proximity of AQMA 6 to several industrial estates and processes contributes to the higher percentage of HGVs at this location. Having several bus routes pass through AQMA 7 will increase the impact of this source, although it is acknowledged that significant work has been undertaken by the highway authorities to electrify buses in Leicester and Leicestershire, which should contribute to reductions in NO_2 from this source. This highlights the need for measures focussed on reducing diesel vehicle usage, encouraging EVs and working with businesses to implement greener practices. Some of the bus operators are using electric buses on routes in Blaby District.

Detailed dispersion modelling was not used to calculate the source apportionment above due to financial constraints. The process used is limited and therefore the results are largely indicative. Given the current situation in terms of exceedance of AQOs (as discussed earlier in this AQAP), this less complex approach is considered reasonable.

The main risk to exposure from air pollution in both AQMAs will be to residents and those working in those areas. In addition, some people will be exposed, albeit for a short period of time, by walking, biking, scooting and driving through the areas.

3.4 Required Reduction in Emissions

In 2024, both AQMA 6 and AQMA 7 were compliant with the annual mean AQO for NO_2. The most recent exceedance in AQMA 6 was in 2023, where DT118 recorded an exceedance of 40.3 µg/m^3. The most recent year of exceedance for AQMA7 was in 2022 where CM6 recorded 47.8 µg/m^3, once distance corrected this exceedance was 43.0 µg/m^3.

The required reduction in NO_2 and NO_x is shown below in Table 7 based on the most recent exceedances of the AQOs. Guidance from Chapter 7 in TG22 and the NO_x to NO_2 calculator were used to determine these figures. The applicable input parameters were applied on the general inputs tab when using the NO_x to NO_2 calculator (Version 9.1).

Further supporting technical information on how these reductions were calculated can be found in Appendix D.

Table 7: Required reduction in NO_2 and NO_x

AQMA	Most recent exceedance (µg/m^3)	Required reduction in NO_2 (µg/m^3)	Required reduction in NO_x (µg/m^3)	Percentage decrease required in NO_x (%)
AQMA 6	40.3	0.3	1.07	1.3
AQMA 7	43.0	3.0	10.75	13.3

3.5 Key Priorities

Based on the information provided overleaf, the following key areas have been defined for action, although there is some overlap between the categories. The focus is to achieve and maintain compliance with the National Air Quality Objectives and this is proposed to be achieved through the following priorities:

Priority 1: Promoting the use of low/ zero emission transport and infrastructure

- Installation of EV charging infrastructure throughout the district through collaboration with partners.
- Leading by example and continuing to improve the Council's own vehicle fleet using alternative fuel options and upgrading to EV's where possible. Seeking out additional funding sources to assist when available.
- Encouraging the use of sustainable travel options, such as on demand bus services, EV bus services, Park and Ride, and car sharing. The Choose How You Move webpage has resources and information on active travel in Leicester and Leicestershire.
- Incentivising and promoting the benefits of using EV's for Hackney Carriage and Private Hire Licence holders.
- Ensuring existing Section 106 agreements are adhered to, such as the building of bypasses and bridges to divert traffic away from potential areas of concern.

Priority 2: Environmental Permitting and other regulatory measures

- To use legislation and enforcement actions to control air pollution.
- To ensure all inspections are completed within statutory timeframes and actions followed up and addressed.

Priority 3: Policy Guidance and Development Management

- To use the Local Plan to shape the future development of the district's towns and villages, whilst considering the impacts on air quality.

- Using Section 106 agreements to require developers to contribute towards the mitigation of adverse air quality impacts and contribute positively to the district's infrastructure.
- To continue collaborative work to build a strong network of air quality advice and support within the district and neighbouring authority districts.
- Working with LCC Highways to advise on traffic management projects to improve air quality e.g. alterations to traffic light signalling and junction improvements.
- Scrutinizing planning applications to ensure any air quality impact of development is minimised and aligns with actions within this AQAP.
- Working closely with Public Health colleagues to ensure use of Health Impact Assessments when appropriate.

Priority 4: Public Health and wellbeing education and behavioural change

- To continue actively contributing to the Air Quality and Health Partnership, led by the Leicestershire County Council Public Health team. This multi-agency group delivers a shared action plan based on the 2024 Health Needs Assessment, targeting air quality and health improvements across the county.
- To engage with schools and businesses across the district to promote active travel.
- To promote Clean Air Day activities and lead by example.

Priority 5: Reducing emissions from domestic heating, industry and services

- To conduct a review of the district's Smoke Control Areas and update the enforcement policy to ensure compliance.
- To educate residents and businesses through website, newsletters, business events and social media.

Priority 6: Air Quality Monitoring

- To continue to assess and review NO_2, NO_x and PM levels throughout the district in order to achieve and maintain compliance with the AQOs.

- To carry out additional investigatory works to help identify any new areas of concern in order to take proactive actions to prevent levels exceeding the AQOs.
- To proactively seek out funding options and grants to enable further improvements to air quality within the district.

4 Development and Implementation of Blaby District Council's AQAP

4.1 Consultation and Stakeholder Engagement

In developing this AQAP, the Council have worked with other local authorities, agencies, businesses and the local community. Schedule 11 of the Environment Act 1995, as amended by the Environment Act (2021), requires local authorities to consult the bodies listed in Table 8.

The following stakeholders were consulted on the draft version of this document:

- Parish Councils and elected members
- Other interested parties that have previously contacted us regarding air quality
- Local businesses
- Universities
- All district residents, with particular focus on those living and working within AQMA6 and AQMA7

The 8-week consultation began on 3rd September 2025 and finished 29th October 2025. Public consultation was conducted through the publishing of a draft version of this AQAP on the Council's website and notifying relevant stakeholders and interested parties of consultation commencement via email, letter or the Council's social media and newsletter (as appropriate).

The response to the consultation stakeholder engagement can be found in Appendix A: Response to Consultation. All feedback received has been reviewed and, where relevant, incorporated into this AQAP and ongoing strategy.

Table 8: Consultation Undertaken

Consultee	Consultation Undertaken
The Secretary of State	Yes
The Environment Agency	Yes

Consultee	Consultation Undertaken
National Highways	Yes
All neighbouring local authorities	Yes
Leicestershire County Council	Yes
Other public authorities as appropriate, such as Public Health officials	Yes
Bodies representing local business interests and other organisations within the AQMAs	Yes

4.2 Steering Group

A working group of officers, including representatives from Environmental Services (Blaby District Council); Highways and Public Health (Leicestershire County Council), Leicester City Council, and representatives from the seven districts within Leicestershire is established. The group is known as the Air Quality and Health Partnership and meets every 6 months to discuss concerns, actions, share ideas and any information relating to air quality and health, as well as co-ordinated work on shared projects. The key roles of the partnership are as follows:

- To provide strategic direction for reducing air pollution and its harmful effects on health.
- To provide clear leadership and vision in activities that seek to improve air quality in Leicestershire.
- To identify actions that prioritise and respond to local need and the groups most vulnerable to the impact of poor air quality.

The partnership has a joint action Plan that was developed as part of the Leicestershire Health Needs Assessment: Air Quality and Health 2024, which sets priorities for collaborative efforts to improve air quality and health throughout the County.

Recently, 2 subgroups of the Partnership have been established to focus on specific topics and take the related elements of the partnership action plan forwards: Transport & Communities (Children & Families, Schools) and Data & Mapping (Industry & Agriculture).

Although the Partnership will assist in co-ordinating the delivery of some of the Actions in this AQAP, it is likely that a separate Steering Group will be needed dedicated to the AQAP. Such a Steering Group will include colleagues from Leicestershire County Council, as well as from Blaby District Council. The Steering Group will meet on a quarterly basis, but the frequency of meetings would be appropriate to the Actions that were actively being pursued at the time.

5 AQAP Measures

Table 9 shows Blaby District Council's AQAP measures. It contains:

- A list of the actions that form part of the plan;
- The departments/organisations responsible for delivering this action;
- Estimated cost of implementing each action;
- Expected benefit in terms of pollutant emission and/or concentration reduction;
- The timescale for implementation; and
- How progress will be monitored.

NB: Please see future Annual Status Reports (ASRs) for annual updates on implementation of these measures.

Table 9 – Air Quality Action Plan Measures

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	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	Publication of updated Local Plan	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2025	2026	BDC	BDC	NO	Funded	< £10k	Implementation	The aim of this measure is to ensure air quality is thoroughly considered in future development	Introduction of new Local Plan with air quality addressed	The new Local Plan is currently being developed, with a draft expected April 2026. Environmental Services have been involved to ensure air quality is thoroughly considered	
2	Continued installation of EV Charging Points and improving EV charging infrastructure	Promoting Low Emission Transport	Other	2025	2026	BDC, LCC, neighbouring local authorities	Partial government fund and remaining from local authorities	NO	Funded	£1 million - £10 million	Implementation	Up to 1µg/m^3	EV Chargers installed	Harborough District Council secured funding in 2023. The contractors have been appointed and the planning application approved. Works are expected to commence in 2026 to install EV Chargers across the County	
3	Increase and improve air quality information and advice	Public Information	Via the Internet	2025	2026	BDC	BDC	NO	Funded	< £10k	Planning	Not quantifiable	Information improved	A review is scheduled for the information available to the public. Particular attention will be paid to information on what the public can do to improve air quality	

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	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
4	Review and increase enforcement of existing Smoke Control Areas (SCAs)	Policy Guidance and Development Control	Other policy	2025	2026	BDC	Defra, BDC	YES	Funded	£10k - 50k	Planning	Up to 0.5 $\mu g/m^3$	Increase of enforcement action in SCAs	BDC has received a grant from Defra to review our current Smoke Control Policy. Officers are currently in the planning stage for this project	
5	Implementation of Active Travel Strategy 2024	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	2024	2034	BDC	BDC	NO	Funded	£50k - £100k	Implementation	Up to 1$\mu g/m^3$	Strategy Actions implemented	Both an Active Travel Strategy and Active Travel Action Plan were introduced in 2024	
6	Collaborative partnership working and Information sharing	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2025	Ongoing	BDC, LCC, neighbouring local authorities	BDC, LCC, neighbouring local authorities	NO	Funded	< £10k	Implementation	Not quantifiable	Continued collaboration and effective information sharing	BDC regularly meets with other stakeholders	
7	Control of Industrial Emissions	Environmental Permits	Measures to reduce pollution through IPPC Permits going beyond BAT	2025	Ongoing	BDC	BDC	NO	Funded	< £10k	Planning	0.5$\mu g/m^3$	Inspections completed and a decrease in risk rating for processes	BDC currently conducts EPR inspections, a review will be conducted to ensure these are all up to date	

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	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
8	Promote uptake of sustainable transport, such as EVs and buses	Promoting Travel Alternatives	Intensive active travel campaign & infrastructure	2025	Ongoing	BDC, LCC	BDC, LCC, s106 agreements	NO	Not Funded	£10k - 50k	Planning	0.5µg/m^3	Alternatives promoted and provided	Enderby Hub s106 agreement in place to provide all Hub employees with a bus pass. Other ways to promote alternative travel will be explored	
9	Promote benefits of car sharing schemes/bus routes and alternative modes of transport to local businesses	Alternatives to private vehicle use	Car & lift sharing schemes	2025	2026	BDC	BDC	NO	Funded	< £10k	Planning	Up to 0.5 µg/m^3	Meeting attended and alternatives promoted	Intention to engage with local businesses through the BDC Business Breakfasts	
10	Complete anti-idling campaign	Public Information	Via other mechanisms	2026	2026	BDC	BDC	NO	Not Funded	< £10k	Planning	Not quantifiable	Campaign delivered	Currently in early planning stages	
11	Delivery of highway improvements associated with the Lubbesthorpe Development	Traffic Management	UTC, Congestion management, traffic reduction	2025	Ongoing	BDC Planning, LCC, local developer	LCC, s106 agreements	NO	Not Funded	£1 million - £10 million	Planning	Up to 1µg/m^3	Highway improvements delivered resulting in a decrease in traffic and queuing	Lubbesthorpe Development s106 agreement to improve junctions at Foxhunter roundabout, Desford road junction and to build a bridge over M69.	

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	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
12	Encourage / Facilitate home-working	Promoting Travel Alternatives	Encourage / Facilitate home-working	2025	Ongoing	BDC	BDC	NO	Funded	< £10k	Planning	Not quantifiable	Less journeys into work	BDC currently has a flexible working policy in place that allows for home working	
13	Taxi Licensing schemes and promotion	Promoting Low Emission Transport	Taxi emission incentives	2025	2028	BDC	BDC	NO	Funded	< £10k	Planning	Up to 0.5µg/m^3	Increase in number of PHVs/HCVs using scheme	Current Hackney Carriage and Private Hire Policy 2022-2027 provides financial incentives. Ways to promote this scheme will be explored and a new policy will need to be published for 2027	
14	Upgrading of the Council's own vehicle fleet to greener alternatives	Vehicle Fleet Efficiency	Vehicle Retrofitting programmes	2024	Ongoing	BDC	Defra, BDC	YES	Funded	£100k - £500k	Implementation	0.5µg/m^3	New vehicles in operation	Electric road sweeper is now operational and the retro-fitted electric RCV is expected to be operational in 2025. A vehicle naming competition was held with prizes given out between November 2024 - February 2025	
15	Air quality monitoring; including investigatory indicative monitoring and detailed	Other	Other	2025	2026	BDC	BDC	NO	Funded	£10k - 50k	Implementation	Not quantifiable	Monitoring completed and information gained	The Council currently monitors across the district however more investigatory monitoring and a detailed source apportionment	

Measure No.	Measure	Category	Classification	Estimated Year Measure to be Introduced	Estimated / Actual Completion Date	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
	source apportionment													exercise at more locations would be beneficial	

Notes:

Measures are presented in priority order, based on cost-benefit analysis. The potential effectiveness of the measure was weighted against the potential cost and timescale of the measure.

More information on each measure can be found in Timescales of the AQAP measures section below.

5.1 Timescales for the AQAP Measures

Measure 1 – Publication of updated Local Plan

The new Local Plan is currently being produced. The Plan sets out the future for Blaby District development and where future housing, retail and employment sites can expect to be built. A full draft is expected in April 2026, which will be consulted on with residents, businesses and communities asking their views on the proposals.

The Environmental Services Team has been consulted during the drafting process to comment on the potential effects to air quality, and a Strategic Air Quality Assessment is currently being undertaken.

Measure 2 – Continued installation of EV Charging Points and improving EV charging infrastructure

Flex-D is a project led by Harborough District Council which includes installation of solar powered charging hubs in each district or borough in Leicestershire. As part of this scheme, an EV charging hub will be installed at Enderby Leisure Centre. Enderby Leisure Centre is situated very close to AQMA 6 so it is hoped this will help to reduce vehicle emissions. This project is partially funded through a government grant, which was awarded in 2023.

The planning application for the installation has been approved and works are expected to commence at Enderby Leisure Centre during 2026. The charging points are expected to be operational for the public to use by 2026/2027.

Measure 3 – Increase and improve air quality information and advice

To protect and improve population health, the Council will strengthen the provision of clear, actionable advice on air quality. While the Council's air quality webpages are routinely reviewed by Environmental Services and Communications teams, current content offers limited guidance on steps residents can take to reduce exposure and contribute to cleaner air.

Following adoption of the AQAP, the Environmental Services Team will undertake a comprehensive review of the information available to residents. This review will ensure advice is evidence-based, accessible, and supports behaviour change that

reduces health risks associated with poor air quality. The review is scheduled for completion in 2026.

Measure 4 – Review and increase enforcement of existing Smoke Control Areas (SCAs)

Both AQMAs are also within Smoke Control Areas (SCAs) and therefore ensuring the Smoke Control Orders are enforced appropriately is essential to improving air quality. In 2024, the Council received a grant from Defra known as a 'New Burdens' fund. The grant was awarded to provide support to improve the enforcement and management of smoke emissions in SCAs. It is expected this review of the Councils SCAs will be conducted and implemented through 2026.

Measure 5 – Implementation of Active Travel Strategy 2024

Both the Active Travel Strategy and Active Travel Action Plan were published in 2024. They contain actions the Council will implement through to 2034 to increase active travel infrastructure and to promote an increase in active travel.

Measure 6 – Collaborative partnership working and information sharing

The Council already regularly meets and collaborates with neighbouring local authorities and stakeholders including through the Air Quality and Health Partnership and the Children and Young People Respiratory Working Group. This measure will be ongoing and the Council will continue to explore additional ways to collaborate with these groups and to build on existing information sharing.

Measure 7 – Control of Industrial Emissions

Blaby District Council Environmental Services Team currently conduct Environmental Permit Regulation inspections for 34 active processes. This measure aims to go beyond Best Available Technique (BAT) for emission controls within these processes. Five of these processes are located off Mill Hill in Enderby (AQMA6). These inspections will be ongoing however it is anticipated that all inspections will be up to date by March 2026.

Measure 8 – Promote uptake of sustainable transport, such as EVs and buses

Encouraging the use of sustainable transport and therefore reducing the number of petrol and diesel cars on the road will directly reduce NO_2 emissions in the district. The Council will explore campaigns to promote the EV charging bays already in existence in the district and the bus routes available for residents to use.

In addition, the Council will look to promote ownership of EV's through social media, campaigns and promoting incentive schemes that become available. It is estimated 67.2% of households in the UK have a driveway and that 5.26% of those households have an EV charging point installed. It is therefore estimated that in the district (of 44,105 households), 29,640 have a driveway and of those approximately 1,560 households will have an EV charger installed[21]. The Council will use these statistics as a baseline to measure future success.

It is expected initial projects can be completed in 2026 however this will be an ongoing measure.

Measure 9 – Promote benefits of car sharing schemes/bus routes and alternative modes of transport to local businesses

The Council regularly hosts breakfast meetings with local businesses. The aim of the measure is to attend one of these breakfasts and interact more closely with local businesses to inform them on the benefits of car sharing schemes for their employees. The Environmental Services Team expect to attend a local business meeting in 2026.

Measure 10 – Complete anti-idling campaign

The Council will complete an anti-idling campaign to encourage drivers to turn off their engines when queuing for long periods in traffic or waiting in their vehicle. It is expected this work will commence and be completed in 2026.

[21] Home and community EV charging stats

Measure 11 – Delivery of highway improvements associated with the Lubbesthorpe Development

The Lubbesthorpe Development is a large sustainable urban development, proposing over 4,000 new residential dwellings along with other infrastructure such as schools, businesses and retail units. An S106 agreement is in place, meaning the developers have committed to provide funds to improve both the Foxhunter roundabout junction and the Desford Road junction. This should help alleviate congestion, particularly for AQMA 6. The developers have also committed to building a new M69 link and bridge which should also ease congestion and therefore emissions locally.

These commitments are not expected until Phase 3 and Phase 4 of the development. Phase 1 is now close to completion.

Measure 12 – Encourage and facilitate home working

Blaby District Council has already adopted a Flexible Working Policy which allows employees hybrid-working, enabling them to work at both the office and at home. Home working reduces the number of commuters and journeys. This measure will be ongoing as the Council continues to explore ways to expand and promote this policy.

Measure 13 – Taxi Licensing schemes and promotion

The current Hackney Carriage and Private Hire Policy 2022 – 2027 provides financial incentives for both EVs and ULEVs for licensed drivers and operators. EVs receive a 50% discount on licensing fees and ULEVs receive a 25% discount on licensing fees. The uptake for the scheme has been low and no more than two EVs or ULEVs have been licensed at one time. It is thought this is because of the high upfront costs of purchasing an ULEV or EV. The Council will explore ways to promote this scheme to increase its uptake. An updated Hackney Carriage and Private Hire Policy will be due in 2027 and therefore increased incentives can be explored during the drafting of this policy.

Measure 14 – Upgrading of the Council's own vehicle fleet to greener alternatives

In 2024, the Council's own fleet travelled approximately 264,794 miles delivering services to the residents and businesses in the district. The refuse vehicles already use Hydrogenated Vegetable Oils (HVOs) as a fuel source, which is a greener form

of diesel and accounts for 198,130 of those miles (74.8%). The Council aims to convert the remaining fleet vehicles to HVOs where possible.

In 2023, the Council was awarded an air quality grant from Defra of £573,701 for the 'Let's Go Electric' project. The project used the grant monies to purchase an electric road sweeper and to convert an existing diesel Refuse Collection Vehicle (RCV) to fully electric. The road sweeper is already in use in the district, and the Council took receipt for the converted RCV in December 2024.

A vehicle naming competition was held for both the road sweeper and the RCV to increase awareness of the project. Local children were asked to submit potential names for each vehicle in November 2024, with winners announced in December 2024.

It is planned that the converted RCV will be used within the AQMAs to help reduce emissions in these areas. This project is expected to be completed with the final report submitted to Defra in 2025.

Measure 15 – Air quality monitoring, including investigatory indicative monitoring and detailed source apportionment

The Council currently measures air quality across the district through Continuous Monitors (CM), Diffusion Tubes and using indicative, low-cost monitoring devices, Zephyrs®.

The Council works closely with the Air Quality and Health Partnership to share information and reports produced using all types of monitoring including mobile and fixed devices. The Council is working in partnership with Public Health Leicestershire to explore improving public access to real-time air quality data, and communications to help residents make informed decisions.

The Council will continue to conduct investigatory monitoring to identify any new areas of concern with the use of Zephyrs®, CM's and Diffusion Tubes and officers will monitor source apportionment on a bi-annual basis.

This is a continuous action and will be achieved throughout the lifetime of the AQAP and beyond.

5.2 Maintaining Safe Air Quality

It is important to ensure that the district remains compliant with AQOs even after the revocation of the AQMAs. Several of the proposed measures in this AQAP will ensure AQOs are maintained in the long term.

Specifically, the introduction of the Local Plan (measure 1) will ensure that air quality is considered when deciding where future development will be located. The continuation of air quality monitoring, particularly investigative monitoring (measure 15), will ensure the Council will be aware of any exceedances of the AQOs in the future. This will then allow for immediate action to improve air quality levels again.

Several measures, specifically measures 2, 3, 4, 5, 6, 7, 8, 9, 10, and 12 are aimed at changing behaviour of the public and therefore these measures are expected to reap long term benefits.

Once both of the current AQMAs achieve compliance and have been revoked, the Council will develop and adopt an Air Quality Strategy. A local Air Quality Strategy, in conjunction with continued monitoring, should ensure that air quality levels within the district remain below the AQOs.

It is expected that AQMA 6 will be revoked by 2028, following three years compliance with the AQOs. Should current trends continue, the AQMA will be compliant in both 2025 and 2026. As shown in Table 7, only a 1.3% decrease in NO_x is required to achieve compliance and the proposed measures in this AQAP are expected to achieve this. Once the data for 2026 has been ratified and the ASR accepted in 2027, the AQMA should be revoked late 2027 / 2028.

Revocation of AQMA 7 is expected by 2027. Compliance in 2025, consistent with the current downward trend, will mean three years consecutive compliance with AQOs. The annual average for NO_2 has been significantly below the AQO in 2023 and 2024 since the initial exceedance in 2022. A 13.3% reduction in NO_x is required from the 2022 exceedance, and it is expected this will be achieved given the current downward trend. The data will need to be ratified in 2026 and submitted for approval through the ASR. Therefore, AQMA7 can expect to be revoked either late 2026 or in 2027.

It should be noted both revocations of AQMA6 and AQMA7 are subject to current trends continuing.

6 Quantification of Measures

Blaby District Council expects the implementation of the outlined measures will result in the relevant objective(s) being attained by:

- 2028 within AQMA 6: Mill Hill
- 2027 within AQMA 7: Lubbesthorpe Road, Braunstone Town

The table below discusses the potential impact each proposed measure will have and, where possible, provides an estimation of the potential NO_2 reduction in each AQMA. Due to the difficulty in quantifying potential emission reduction of soft measures, Officer's professional judgement has largely been used.

Table 10 – Estimated impact of proposed measures

Measure	Qualitative assessment of impact	Assumptions/limitations for Quantitative assessment of impact	Potential reduction in NO_2: AQMA 6	Potential reduction in NO_2: AQMA 7
1	The publication of the new Local Plan will ensure air quality is thoroughly considered during future development in the district.	It is not possible to quantify the potential reduction in NO_2 as a result of the publication of the new Local Plan. The measure is proposed to ensure compliance with AQOs in the future opposed to reducing current NO_2 levels.	Not applicable	Not applicable
2	Installing more EV charging points in the district will encourage and enable the move to hybrid and electric vehicles which is hoped to contribute to a reduction in petrol and diesel vehicles on the road and reduce NO_2 emissions.	An additional 8 charging points are due to be installed at Enderby Leisure Centre, which is relatively close to both AQMAs. The additional chargers are likely to only have a negligible direct effect on the reduction in emissions, however it encourages the move to EVs in general. The potential reduction is based on officers' professional judgement. NO_2 and other tailpipe emissions should reduce with increased EV use however consideration should be made to emissions associated with wear of tyres and brakes.	Up to 1µg/m^3	Up to 1µg/m^3

Measure	Qualitative assessment of impact	Assumptions/limitations for Quantitative assessment of impact	Potential reduction in NO_2: AQMA 6	Potential reduction in NO_2: AQMA 7
3	An improvement of the information available to the public can lead to residents making better decisions for air quality.	This measure having an impact is dependent upon the number of individuals that choose to change their behaviour to improve air quality. It is not possible to accurately estimate a potential reduction.	Not applicable	Not applicable
4	A review and increase in SCA enforcement could result in a reduction in log burner use and domestic bonfires. Enforcement action could encourage behaviour change.	Both AQMAs are within Smoke Control Areas and therefore this measure would contribute to AQMA compliance with AQOs. It is difficult to assess the effects of this measure, however an assessment has been made using officers' professional judgement	Up to 0.5 $\mu g/m^3$	Up to 0.5 $\mu g/m^3$
5	The Active Travel Strategy and Action Plan proposed several initiatives to encourage use of active travel alternatives, increase the number of cycle routes in the district and empower each school in the district to adopt an Active Travel Plan.	The measures within the Active Travel Action Plan are wide ranging and many of them rely on other stakeholders taking action with support from the Council. It is therefore difficult to assess the impact, however an assessment has been made using officers' professional judgement.	Up to 1 $\mu g/m^3$	Up to 1 $\mu g/m^3$
6	Collaborating with other local authorities and stakeholders will allow more information to be gained and explore additional overlap of projects and initiatives.	This measure focusses more on information gaining and partnership building rather than directly causing a reduction in NO_2 emissions.	Not applicable	Not applicable
7	Ensuring all inspections are up to date and encouraging processes go beyond BAT will reduce NO_2 emissions. It is also expected the measure will allow processes to look at other areas of their operations to reduce emissions.	There are several industrial processes with environmental permits adjacent to AQMA 6 and therefore potential reductions are expected at AQMA 6. However, AQMA 7 is not in close proximity to any permitted processes. The estimated reduction has been made by officers' professional judgment.	Up to 0.5 $\mu g/m^3$	Negligible
8	An increase in the number of people using sustainable	This measure resulting in a reduction in NO_2 is dependent on the number of individuals that choose to move to sustainable transport and therefore the	Up to 0.5 $\mu g/m^3$	Up to 0.5 $\mu g/m^3$

Measure	Qualitative assessment of impact	Assumptions/limitations for Quantitative assessment of impact	Potential reduction in NO_2: AQMA 6	Potential reduction in NO_2: AQMA 7
	transport will result in less vehicles.	potential reduction has been made using officer's professional judgement.		
9	Providing businesses with the benefits of car schemes and other air quality initiatives could have a direct impact on NO_2 emissions. It is also hoped this will encourage businesses to assess their operations as a whole to find additional methods of reducing NO_2 emissions.	Similar to measure 10, this measure is dependent on how many businesses decide to act on the advice and options provided. There are no businesses within AQMA 7 and therefore this measure is expected to have a negligible effect. However, there are several businesses within and adjacent to AQMA 6 and therefore the Council will attempt to work with these businesses specifically.	Up to 0.5 $\mu g/m^3$	Negligible
10	An awareness campaign on the effects of vehicle idling is hoped to reduce the amount of idling and reduce the levels of NO_2 in the district.	A study on current idling levels in the district and the effects of this on NO_2 levels has not been carried out. The effects of the campaign would also depend on the number of individuals who decide to reduce the amount of time idling. Therefore, is not possible to quantify an accurate potential reduction in emissions from this measure.	Not applicable	Not applicable
11	Junction improvements and an additional flyover for the M69 would reduce the amount of traffic driving through the AQMAs and therefore reduce emissions.	The s106 agreements are dependent on a significant number of additional houses being built and occupied and therefore it is difficult to accurately assess the potential reduction in emissions from the proposed junction improvements. The estimations have therefore been made using officers' professional judgement. Whilst emissions in the area of concern should reduce with road / junction improvement, there is potential for emissions to increase in other areas that become affected by the resulting re-routing and / or relocated traffic queues.	Up to 1 $\mu g/m^3$	Up to 1 $\mu g/m^3$

Measure	Qualitative assessment of impact	Assumptions/limitations for Quantitative assessment of impact	Potential reduction in NO_2: AQMA 6	Potential reduction in NO_2: AQMA 7
12	Encouraging employees to work from home would reduce the number of vehicle journeys to the Council Offices and therefore reduce NO_2 emissions.	A study has not been carried out to assess the current number of journeys to the Council offices at present and therefore it is difficult to estimate the potential reduction. Additionally, the effect on the AQMAs would depend on how many employees drive through AQMA 6 or AQMA 7 and therefore this is work that can be explored in the future.	Not applicable	Not applicable
13	If the majority of Taxis and Private Hire Vehicles transferred to ULEV or EVs, this would have a direct reduction in NO_2 emissions.	This measure having an impact is dependent upon operators and drivers choosing to upgrade their vehicles to electric and therefore the exact reduction is difficult to quantify. It is currently unknown how many journeys Taxis and Private Hire Vehicles currently do, and therefore this information would be needed too. An estimate has been made using officers' professional judgement.	Up to 0.5 $\mu g/m^3$	Up to 0.5 $\mu g/m^3$
14	Upgrading the Council's own vehicle fleet will have a direct impact on NO_2 emissions. Whilst current upgrades are limited to a road sweeper and RCV, it is anticipated in the future all Council vehicles will be upgraded. The Council also hopes to lead by example and that this measure will encourage other businesses and individuals to change to EVs.	The current number of Council vehicle journeys within the AQMAs is not known. It is also unknown how many vehicles will be upgraded and in what timescale. Therefore, the potential reduction has been made using officers' professional judgement.	Up to 0.5 $\mu g/m^3$	Up to 0.5 $\mu g/m^3$
15	Investigatory indicative monitoring and detailed source apportionment across the district will allow the Council to gain insights and better target measures.	This is an information gathering measure to support other projects and works and is therefore not expected to directly cause a reduction in NO_2.	Not applicable	Not applicable

Measure	Qualitative assessment of impact	Assumptions/limitations for Quantitative assessment of impact	Potential reduction in NO_2: AQMA 6	Potential reduction in NO_2: AQMA 7
		Total potential reduction in NO_2	**Up to 6.0 $\mu g/m^3$**	**Up to 5.0 $\mu g/m^3$**

The Cost-Benefit Analysis below has been produced using professional judgement. Using the above assumptions and measure impact quantification, an impact level has been assigned to each measure.

Cost Level

Cost level has been assigned to each measure, assessing the cost implications. The categories have been given the following criteria:

- Low is less than £10,000
- Medium is between £10,000 and £50,000
- High is greater than £50,000

The exact costs associated with measures are often unknown and therefore an approximate estimation has been made.

Impact Level

The impact level relates to the anticipated reduction in concentrations of local pollutants or the expected impact the measure will have on maintaining concentrations below the AQOs. The categories have been given the following criteria:

- Low – impact on pollutant concentration levels is expected to be small or negligible. Measures assigned this impact level tend to be soft measures more focussed on information sharing.
- Medium – anticipated reduction in NO_2 concentrations of up to 0.5 µg/m^3.
- High - anticipated reduction in NO2 concentrations of above 0.5 µg/m^3.

Table 11 – Estimated Cost-Benefit Analysis of proposed measures

No.	Measure Description	Cost Level	Impact Level
1	Publication of the new Local Plan ensuring air quality is considered in development.	Low	High
2	Installing more EV charging points in the district.	High	High
3	Improve public information to aid better decisions for air quality.	Low	Low
4	Review and increase in SCA enforcement to reduce log burner use/bonfires.	Medium	Medium

No.	Measure Description	Cost Level	Impact Level
5	Active Travel Strategy: more cycle routes, school travel plans, promote active travel.	High	High
6	Collaborate with other authorities/stakeholders to align and share info.	Low	Low
7	Ensure inspections are up to date and encourage going beyond BAT (Best Available Techniques).	Medium	Medium
8	Increase use of sustainable transport to reduce vehicles.	Medium	Medium
9	Support businesses with car schemes and air quality initiatives.	Medium	Medium
10	Awareness campaign on vehicle idling.	Low	Low
11	Junction improvements and M69 flyover to reduce AQMA traffic.	High	High
12	Encourage employees to work from home.	Low	Low
13	Transition majority of taxis/private hire vehicles to ULEV/EV.	Medium	Medium
14	Upgrade Council's vehicle fleet (e.g. road sweeper, RCV, full EV transition).	High	Medium
15	Investigatory monitoring and detailed source apportionment.	Medium	Low

Appendix A: Response to Consultation

Response to Defra appraisal comments

Several comments were received by Defra as part of the draft AQAP Appraisal Report. These have been listed below with the response or action taken for each comment.

Appraisal Comment	Response/Action
The AQAP contains a good overview of the remaining AQMAs 6, 7. However it is unclear from the data presented in Tables 1 and 2 whether each monitoring location is an automatic monitor or a diffusion tube (DT). Due to the differing levels of accuracy and precision in these methodologies, compliance should be considered at automatics where an annual average NO_2 concentration is value is below 40 µg/m^3, and below 36 µg/m^3 at DTs.	Tables 1 and 2 have been updated to include the monitoring type and an advisory note on Diffusion Tube compliance level added beneath.
There are figures including the extent of the AQMAs. These are currently in Appendix C but would be good to include in the main body of the report to provide context of the AQMAs Location and extent early on.	The maps have now been moved to earlier on in the report.
Data has been presented in the AQAP from Low Cost Sensors (Zephyrs). This data has been directly compared to the Air Quality Objectives to demonstrate compliance. These Low Cost Sensors cannot be directly compared to the Air Quality Objective for compliance but can be used to support trends and hotspots. The final AQAP should make this distinction clearly. If further support is required, please refer to FAQ148 or contact the LAQM Helpdesk.	The wording has been amended in this section to address these comments and make the distinction clearer.
The AQMA summary Table from the template has been used, however has not been completed accurately, i.e. AQMA 7 states it was declared in 2024, but has two years of compliance. This Table needs to be updated to include what pollutants and periods the AQMAs are declared for (i.e. annual average) and include the concentration at which the AQMA was declared. The data should be outlined more clearly in this section's structure, ideally presenting Table 5 before Tables 1 and 2.	The table has been updated to what pollutants and periods the AQMAs are declared for, including the concentration at which the AQMA was declared. Additionally, text has been

Appraisal Comment	Response/Action
	added underneath the table to clarify the compliance timelines.
Some public health context has been provided; however, this is limited to a generic national view. Additional information on local and regional issues surrounding Nitrogen Dioxide would be beneficial to give a greater context and understanding to the issues faced in Blaby.	Additional wording has been added to this section.
There is a statement on the Local Transport Plan that this considers Air Quality, however this does not explain how. The information should go beyond the statistics to outline any specific measures within the transport plan which influences the AQAP and vice versa. a clear statement on the proposed approach for integration of the Local Transport Plan and the AQAP should be included within the AQAP if this is the council's approach.	Additional wording has been added to this section.
A source apportionment exercise has been undertaken however this is a basic approach using the EFT and not detailed dispersion modelling. An appropriate caveat is included to caution against the reliability of using this approach. It is not clear from the presented data the source of the data used (i.e. DfT traffic counts) and what inputs have been used in the Emissions Factors Toolkit (EFT). Therefore, it is difficult to understand if these are a snapshot of one location in each AQMA, or an average of multiple points across the AQMAs. This is required to be updated in further detail in accordance with TG(22) for the final AQAP to be accepted.	Additional text and calculations have been added to the source apportionment section and an Appendix D has been added to include additional technical information on the source apportionment.
The source apportionment section also contains text discussing a report from Leicester City Council regarding capacity issues on the strategic road network. The relevance of this in the source apportionment section is questioned and it is recommended that either an analysis of queuing vehicles as they contribute to total emissions is completed or this text is moved elsewhere, e.g., to the local air quality context.	Sections of this text have now been moved earlier in the report and other sections have been removed and they were deemed irrelevant.
Background concentration sources have not been considered within the source apportionment exercise. There is no justification for excluding	Additional text and calculations have been added to the source

Appraisal Comment	Response/Action
these. To present a rounded approach, regional and local background concentrations should be considered, and other relevant sources (i.e. Industrial, domestic) should be included. Where not considered relevant these should be justified for exclusion. This information can be obtained from review of the Defra Background Maps. This is required to be updated in further detail in accordance with TG(22) for the final AQAP to be accepted. It is recommended that consideration is given to Regional Background, Local Background, Industrial, Commercial/ Domestic, and Other Transport sources.	apportionment section, and an Appendix D has been added to include additional technical information on the source apportionment. This includes information on the background concentrations.
Calculations of the required reductions in NO_2 and NOx to meet compliance have been presented in Table 6. It is unclear if these are correct as the methodology is for calculation is not shown, though the appropriate section of TG(22) is referenced. Compliance should be considered at automatic monitoring sites where an annual average NO_2 concentration is value is below 40 µg/m^3, and below 36 µg/m^3 at DTs to account for the greater uncertainty of this monitoring method. The calculations should be revised as required to account for the relevant monitoring method used at the exceedance locations. This must be completed accurately for the final AQAP to be accepted.	The methodology used has now been added into section 3.4 and additional calculations are included in Appendix D.
It is stated that many stakeholders will be consulted as part of the AQAP development, however no information on how they have been involved or contacted to date has been provided. This must be included within the final AQAP.	Additional wording has now been added to section 4.1.
A steering group has been established, named the Air Quality and Health Partnership. This group includes Blaby District Council, Highways and Public Health (Leicestershire County Council) and representatives from the other seven Leicestershire districts. It is stated they meet every six weeks. No information on the roles, engagement, actions, activities and ways in which the steering group will push forwards the AQAP are mentioned. All of the above must be included in the final AQAP.	Additional wording has been added to this section.

Appraisal Comment	Response/Action
Quantified reductions in NO_2 for some measures have been presented in Table 9. The methodology used to calculate these figures is based solely on professional judgement. Attempts should be made to quantify the reduction of likely emissions as a result of some of the measures through more rigorous approaches in line with LAQM Supplementary Guidance: Determining the impact of air quality improvement measures (https://laqm.defra.gov.uk/air-quality/aqap-guidance/supplementary-guidance-determining-the-impact-of-air-quality-improvement-measures/) The methodology used should be outlined in the final AQAP.	These have been reviewed however, professional judgement has still been deemed the best way to predict reductions in pollutants. There are too many unknowns to accurately calculate the potential reduction.
A cost benefit analysis has not been undertaken and therefore the measures cannot be prioritised appropriately. A cost benefit analysis must be undertaken as part of the final AQAP as this will help to support the prioritisation of measures to achieve and sustain compliance with the relevant objectives.	A cost benefit analysis has now been included (Table 11).
No calculation or statement on when compliance will be achieved has been included within the AQAP. This must be included in the final AQAP. This should draw on the conclusions of the required reductions in pollutant concentrations required the effectiveness of proposed measures and the timescales across which these will be implemented.	A statement of when compliance will be achieved has now been included.
Measures which are not being progressed, and the reasons why have not been included in the draft AQAP. These should be included in the final AQAP, but if there are no measures to include here, a statement to the effect that all measures considered are being implemented would be sufficient.	All measures are being progressed following the consultation, and this has been made clear in Appendix B.
The AQAP is required to outline how compliance with the relevant objectives will be maintained once compliance with the objectives has been achieved, i.e. through the development and adoption of an Air Quality Strategy.	Additional wording has been added to outline how compliance will be maintained in 5.2.

Appraisal Comment	Response/Action
Defra recommends that Directors of Public Health approve AQAPs. Sign off is not a requirement, however collaboration and consultation with those who have responsibility for Public Health is expected to increase support for measures to improve air quality, with co-benefits for all. Please bear this in mind for the submission of your final AQAP and future iterations.	Director of Public Health signature has been added and approval gained.

Summary of Responses to Consultation and Stakeholder Engagement on the AQAP

The following table details responses received as part of the AQAP consultation and a summary of the feedback.

Consultee	Response
Leicestershire County Council Public Health	The Council have worked closely with Public Health on the development of this AQAP and have received several comments on various drafts. These comments are largely technical, and grammar related and therefore did not alter the main priorities or measures proposed.
Leicestershire County Council Transport Strategy and Policy Team	A few suggested amendments to the text which were made.
Parish Councils	Responses were received from two Parish Councils and the contents of the AQAP has been noted.
UK Health Security Agency	A response was received from the UKHSA. This advised on new technologies the Council could incorporate into data collection and linking data to local healthcare data.
Residents in AQMAs	In total, 16 responses were received from residents either through email or social media. Most of these related to air quality concerns in general opposed to feedback on specific

Consultee	Response
	measures. 56% of resident responses related to concern on current and future planning permissions and how these may affect air quality in the district. 19% of responses related to EV charging units.
NHS ICB	The Leicester, Leicestershire and Rutland Integrated Care Board (LLR ICB) responded and is supportive of measures listed within the Action Plan and believes it will result in measurable health benefits for the local population. LLR ICB is keen to continue to collaborate in the future.
Environment Agency (Local Authority Unit)	No comments made, but forwarded to local regulation team for them to make any comments.

Appendix B: Reasons for Not Pursuing Action Plan Measures

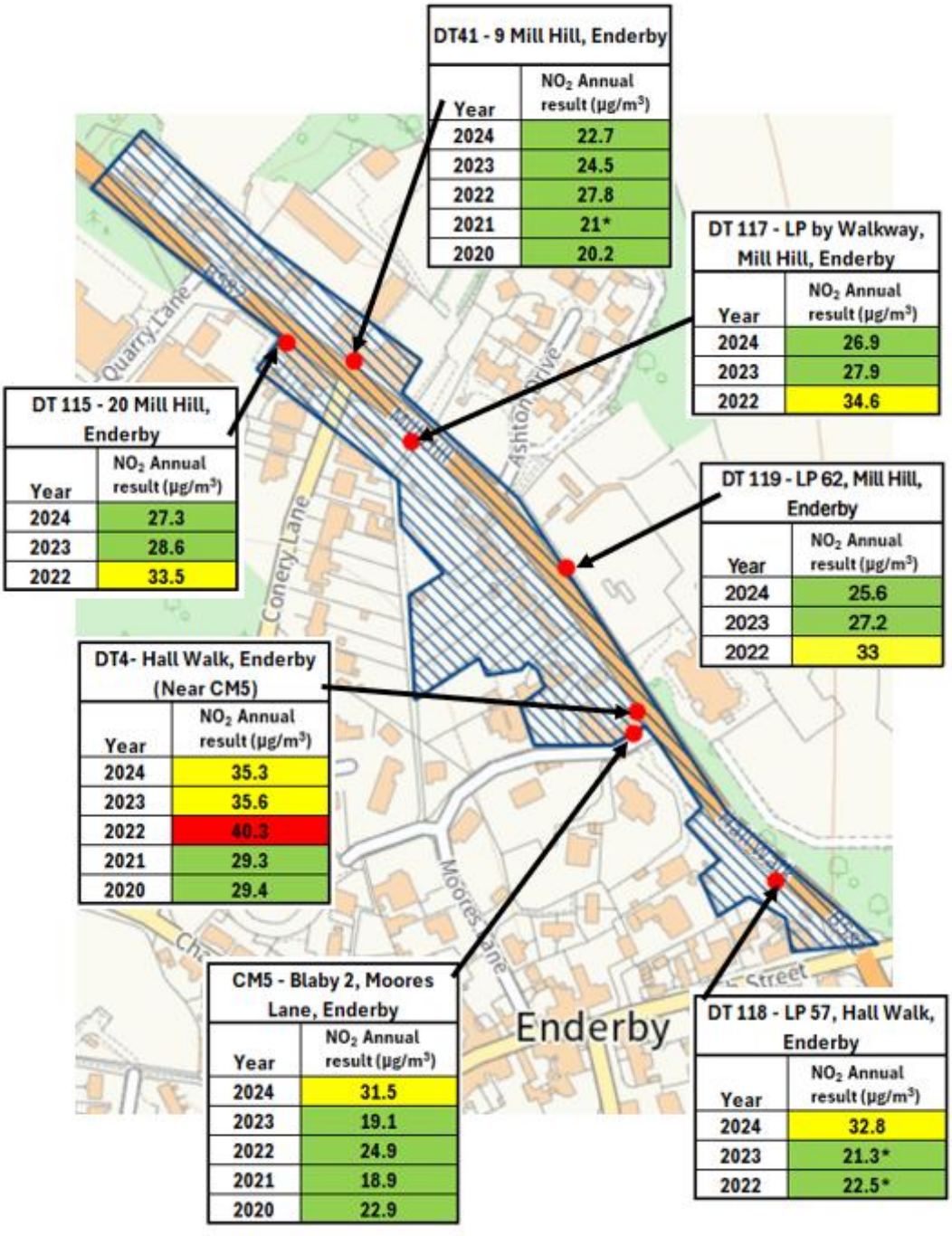
Action Plan Measures Not Pursued and the Reasons for that Decision

Action category	Action description	Reason action is not being pursued (including Stakeholder views)

Blaby District Council intend to progress all measures detailed in this AQAP unless unforeseen circumstances prevent their implementation.

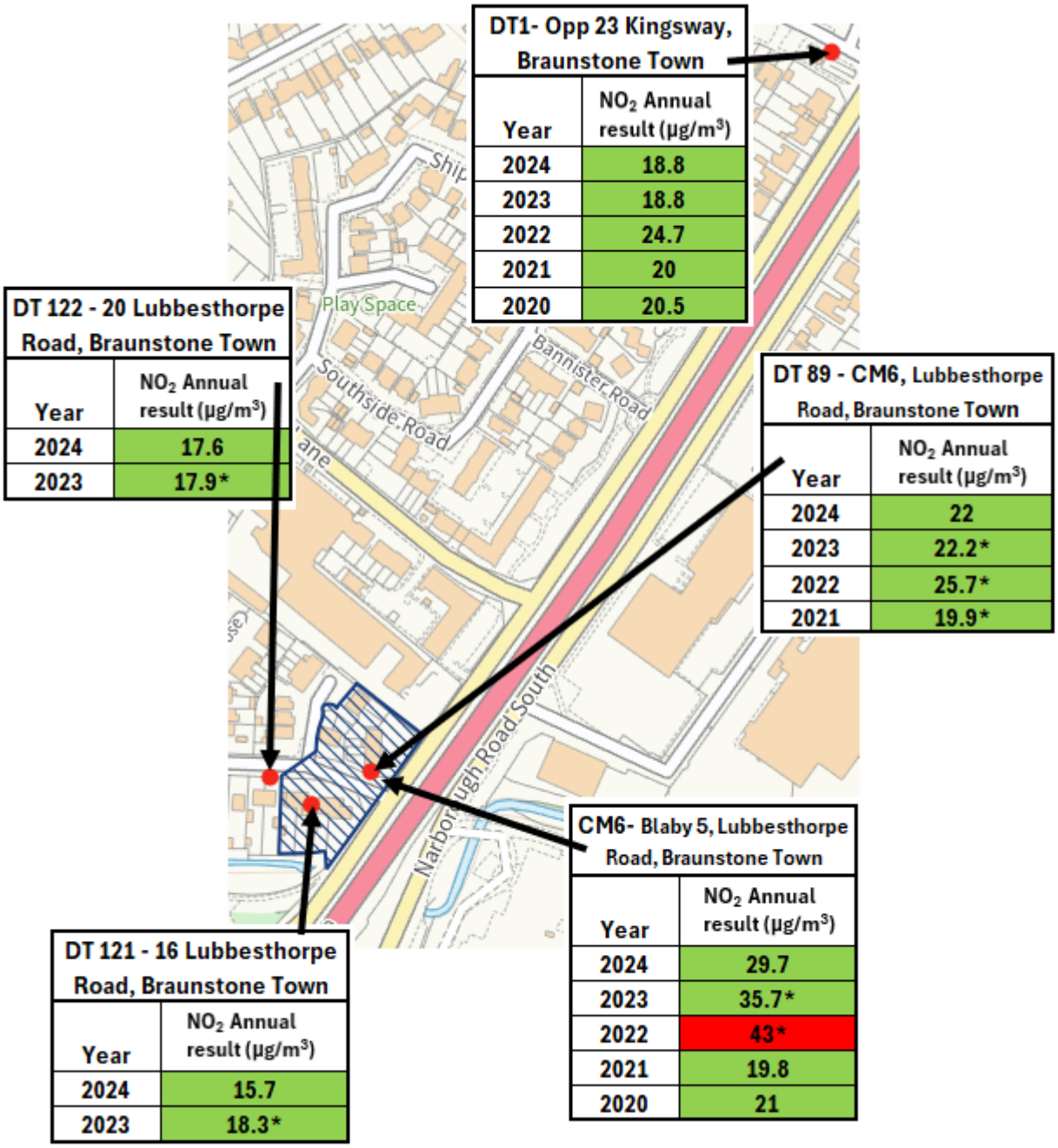
Appendix C : Maps of Air Quality Monitoring

Figure 11: AQMA 6- Mill Hill in Enderby



The map shows the locations and results of the Diffusion Tubes and CM5 in AQMA 6, Mill Hill, Enderby. The AQMA boundary is represented by the blue grid lines. 40µg/m^3 is the National Air Quality Objective for this pollutant. Numbers with a * represent a figure that has been annualised and/or distance corrected.

Figure 12: AQMA 7 – Lubbesthorpe Road, Braunstone Town



The map shows the locations and results of the Diffusion Tubes and CM6 in AQMA 7, Lubbesthorpe Road, Braunstone Town. The AQMA boundary is represented by the blue grid lines. 40µg/m^3 is the National Air Quality Objective for this pollutant. Numbers with a * represent a figure that has been annualised and/or distance corrected. ©Crown Copyright. All rights reserved.

Appendix D: Supporting Technical Calculations

Source Apportionment Methodology and Calculations

A traffic emission-focussed source apportionment was carried out by Blaby District Council officers in May 2025. Officers conducted a manual traffic count at these locations so an accurate snapshot of the specific locations within the AQMAs. The manual count spanned several weeks and covered the hours 7am to 7pm, to match methodology used for manual traffic counts conducted by the Department for Transport[22]. This manual count data was then used calculate the percentages required to be input into the Emissions Factor Toolkit.

For the Primary Inputs in the EFT, the Basic Split Traffic Format was selected; the traffic flow and % HDV from the traffic count were input into the spreadsheet. The selected pollutant was NO_x for the emission rates (g/km), with source apportionment selected as an additional output. The NO_x outputs from the EFT illustrating relative contribution from each vehicle type can be viewed in Figure 13 for AQMA 6 and in Figure 14 for AQMA 7.

[22] Department for Transport (2025) https://roadtraffic.dft.gov.uk/about

Figure 13: AQMA 6- Mill Hill vehicle type NO_x contribution

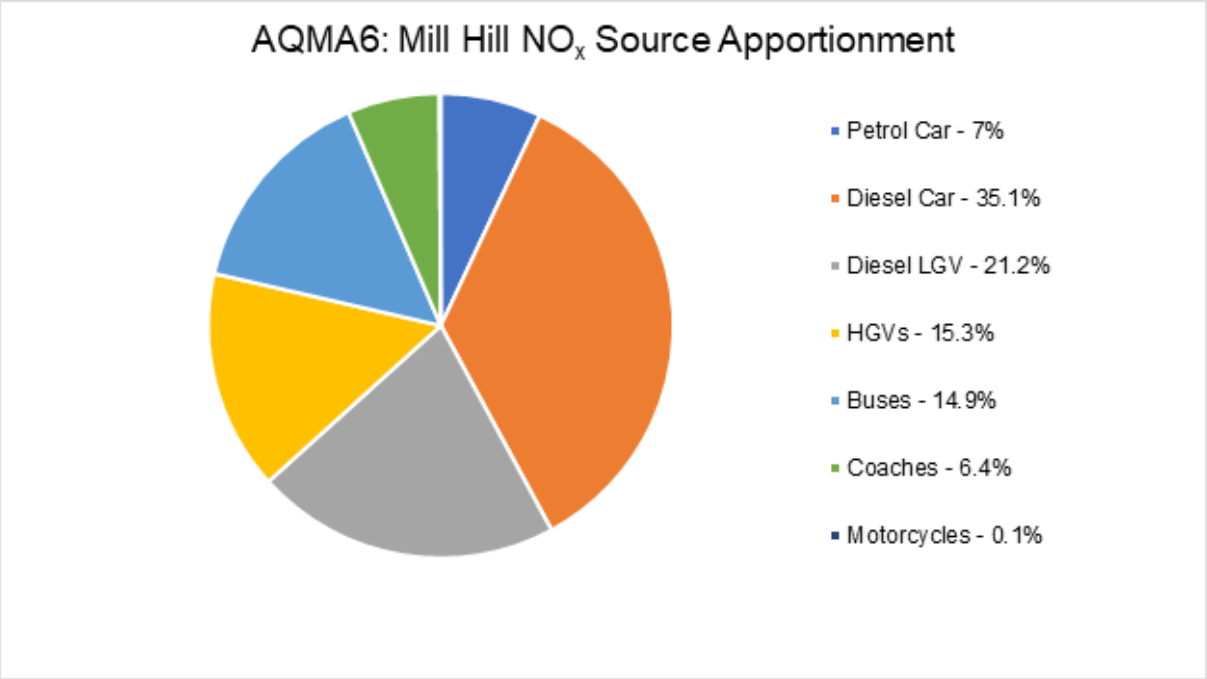
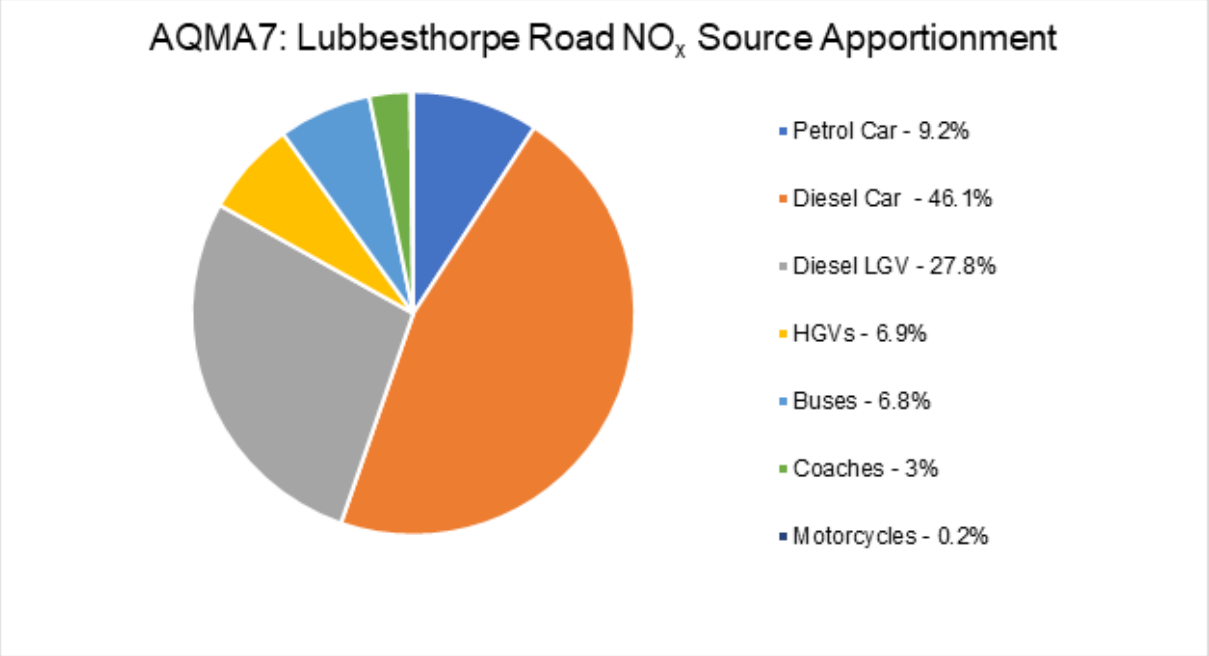


Figure 14: AQMA 7- Lubbesthorpe Road vehicle type NO_x contribution



Defra background maps were used to obtain data on background NO_x and NO_2 using the criteria: Local Authority - Blaby, Region - Midlands, Pollutant - NO_x and NO_2, Year - 2024). Source apportionment undertaken following guidance from Chapter 7, Box 7-5 of TG22. Calculations are detailed in the table below.

Table 12: Source Apportionment Calculations for AQMA 6 and AQMA 7

AQMA	X Grid Ref	Y Grid Ref	Measured annual mean NO_2 [T-NO_2]	Total Background NO_x [TB-NO_x] / NO_2 [TB-NO_2]	Regional Background NO_x [RB-NO_x] / NO_2 [RB-NO_2]	Local Background NO_x [LB-NO_x] / NO_2 [LB-NO_2]	Local No_2 Contribution [L-NO_2] [T-NO_2] - [TB-NO_2]	Local Traffic						
								Petrol Car	Diesel Car	Diesel LGV	HGVs	Buses	Coaches	Motorcycles
AQMA 6 - Mill Hill, Enderby	453500	299500	35.3	13.26 / 10.14	4.53 / 3.46 (9.82%)	8.73 / 6.68 (18.92%)	25.16	1.76 (4.99%)	8.83 (25.01%)	5.33 (15.11%)	3.85 (10.90%)	3.75 (10.62%)	1.61 (4.56%)	0.03 (0.07%)
AQMA 7 - Lubbesthorpe Road, Braunstone Town	455500	300500	29.7	17.11 / 12.82	4.58 / 3.43 (11.56%)	12.53 / 9.39 (31.60%)	16.88	1.55 (5.23%)	7.78 (26.20%)	4.69 (15.80%)	1.16 (3.92%)	1.15 (3.86%)	0.51 (1.71%)	0.03 (0.11%)

AQMA 6 – Mill Hill, Enderby

The below steps show how the source apportionment was calculated for AQMA6, following steps in Box7-5 of TG22.

Step 1: Using the co-ordinates X: 453500 Y: 299500 on the Defra background maps, the local background NO_x was determined to be 8.73µg/m^3 ([LB-NOx] = [TB-NOx] – [RB-NOx]).

Step 2: Following this, the regional background NO_2 and local background NO_2 were determined to be 3.46 µg/m^3 ([RB-NO2] = [TB-NO2] × ([RB-NOx] / [TB-NOx]) and 6.68 µg/m^3 ([LB-NO2] = [TB-NO2] × ([LB-NOx] / [TB-NOx]) respectively.

Step 3: With the highest annual mean concentration for NO_2 being recorded as 35.3µg/m^3 (Hall Walk Diffusion Tube - near to CM5), the worst-case local NO_2 contribution was calculated to be 25.16 µg/m^3.

Step 4: Apportioning local traffic contribution to the worst-case location required the above NO_x contributions (Figure 13) to be recalculated relative to the contribution percentage not attributable to background sources. Table 12 details the NO_2 source apportionment relating to traffic at the worst-case location for AQMA 6 - Mill Hill.

AQMA 7 – Lubbesthorpe Road, Braunstone Town

The below steps show how the source apportionment was calculated for AQMA7, following steps in Box7-5 of TG22.

Step 1: From Defra background maps data for X: 455500 Y: 300500, local background NO_x was calculated to be 12.53µg/m^3 ([LB-NOx] = [TB-NOx] – [RB-NOx]).

Step 2: Subsequently, it was possible to determine regional background NO_2 ([RB-NO2] = [TB-NO2] × ([RB-NOx] / [TB-NOx]) and local background NO_2 ([LB-NO2] = [TB-NO2] × ([LB-NOx] / [TB-NOx]) - 3.43µg/m^3 and 9.39 µg/m^3 respectively.

Step 3: The worst-case location recorded for this AQMA was CM6 (29.7 µg/m^3). Using this value as T-NO_2, 16.88µg/m^3 was determined to be the local NO_2 concentration.

Step 4: Local traffic contribution by vehicle type was calculated by applying relative contribution percentage factor (using data from Figure 14) to the NO_2 concentration not attributable to background sources. Table 12 details the NO_2 source apportionment relating to traffic at the worst-case location for AQMA 7 - Lubbesthorpe Road.

Required reduction in emissions Methodology and Calculations

The methodology found in Box 7-6 of TG22 was used to calculate the required reductions in NO_2 and NO_x. The calculations used are shown below:

AQMA 6

The Defra background maps show the background NO_2 level to be 10.50168 µg/m^3 at AQMA6. The Road NO_x was calculated at 80.35, and for 40 µg/m^3 this is 79.28. This means a 1.07 NO_x µg/m^3 is required, which corresponds to a 1.3 % reduction (to 1 decimal place).

AQMA 7

The Defra background maps show the background NO_2 levels as 13.87116 µg/m^3 at AQMA7. The 9.1 version NO_x to NO_2 calculated the Road NO_x as 81.03 for AQMA7. Continuing the methodology in Box 7-6 in TG22, the Road NO_x was calculated using a total NO_2 of 40 µg/m^3 as 70.28 µg/m^3. 81.03 – 70.28 = 10.75, which corresponds to a 13.3 % reduction (rounded to 1 decimal place).

AQMA	X Grid Ref	Y Grid Ref	Latest exceedance	Local Background NO_2 (µg/m^3)	Road NO_x Concentration (exceedance) (µg/m^3)	Road NO_x Concentration (compliance) (µg/m^3)	Road NO_x reduction [exceedance - compliance] (µg/m^3)	Road NO_x reduction (%)
AQMA 6 - Mill Hill, Enderby	453500	299500	40.3 (2023)	10.50168	80.35	79.28	1.07	1.3%
AQMA 7 - Lubbesthorpe Road, Braunstone Town	455500	300500	43 (2022)	13.87116	80.51	69.87	10.64	13.3%

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
AQO	Air Quality Objective
AQS	Air Quality Strategy
ASR	Air Quality Annual Status Report
BDC	Blaby District Council
CM	Continuous Monitor
Defra	Department for Environment, Food and Rural Affairs
DT	Diffusion Tube
EV	Electric Vehicle
HGV	Heavy Goods Vehicle
LAQM	Local Air Quality Management
LCC	Leicestershire County Council
LGV	Light Goods Vehicle

LRN	Local Road Network
LTP	Local Transport Plan
NO_2	Nitrogen dioxide
NO_x	Nitrogen oxides
PM	Airbourne Particulate Matter
$PM_{2.5}$	Airborne Particulate Matter with an aerodynamic diameter of 2.5µm (micrometres or microns) or less
PM_{10}	Airborne Particulate Matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
RCV	Refuse Collection Vehicle
SCA	Smoke Control Area
SO_2	Sulphur dioxide
SRN	Strategic Road Network
ULEV	Ultra Low Emission Vehicle
LEV	Low Emission Vehicle

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