Sandwell Metropolitan Borough Council

Air Quality Action Plan

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

Local Air Quality Management

December 2025

Information	Sandwell Metropolitan Borough Council Details
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Report Reference Number	Sandwell AQAP 2025
Date	10 December 2025

Executive Summary

This Air Quality Action Plan (AQAP) has been produced as part of our statutory duties required by the Local Air Quality Management framework. It outlines the actions we will take to improve air quality in Sandwell Council between 2025 and 2030. The AQAP sets out how the local authority will exercise its functions in order to secure the achievement of the air quality objectives.

This action plan was adopted in December 2025. Implementation of the outlined measures will result in revocation of the AQMA being attained in 2027.

The relevant Air Quality Management Areas (AQMAs) addressed by this action plan are outlined below:

- Sandwell Air Quality Management Area, declared for exceedances of the annual mean NO_2 objective in 2005.

This action plan supersedes the previous plan, which ran from 2020 to 2025. Key projects delivered under the previous action plan include:

- Declaration of a borough-wide Smoke Control Order (2022), which came into effect in July 2024. An officer was appointed to support its implementation through education-led enforcement, partially funded by Defra Smoke Control Area grants.
- Delivery of a Defra-funded air quality project engaging Faith Centres across the Borough to reduce local air pollution by promoting behavioural change, supported by low-cost air quality monitors, a web-based dashboard, and an air quality toolkit.
- Successful completion and formal exit from the Government's 'Third Wave' NO_2 Monitoring Programme in July 2024.
- Town Centre Active Travel interventions completed in Blackheath and Wednesbury.
- Construction of a protected cycle lane along the A4123 between Burnt Tree and Tipton Road junctions.
- Introduction of bus lane enforcement cameras on three bus lanes, improving bus service reliability and timetabling.
- Air quality modelling to assess the impact of reducing the speed limit from 40 mph to 30 mph on All Saints Way, West Bromwich.
- Creation and launch of Sandwell's 'Auntie Duck Children's Air Quality Education Programme'.
- Enhanced collaboration with the WMCA, including support for a behavioural change research project linked to Sandwell's Smoke Control Area and funding

for 13 ‘Zephyr’ air quality monitors across the borough, contributing to the West Midlands Clean Air website and regional data-sharing platform.

- Delivery of Sandwell’s Bikeability programme, funded by Department for Transport grants.

Air pollution is associated with many 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]. Sandwell Council is committed to reducing the exposure of people in Sandwell to poor air quality in order to improve health.

We have developed 21 actions that can be considered under seven broad topics:

- Environmental permits
- Policy guidance and development control
- Promoting travel alternatives
- Public information
- Transport planning and infrastructure
- Traffic management
- Vehicle fleet efficiency

Our priorities are to protect the health of children and young people within the Borough and drive forward behaviour change with respect to travel choices, particularly focused on the adoption of active travel.

In this AQAP, we outline how we plan to effectively tackle air quality issues within our control. However, we recognise that there are many air quality policy areas that are outside of our influence (such as vehicle emissions standards) but for which we may have useful evidence, and so we will continue to work with regional and central government on policies and issues beyond Sandwell Council’s direct influence.

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[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

Responsibilities and Commitment

This AQAP was prepared by the Pollution Control Team of Sandwell Council with the support and agreement of the following officers and departments:

- Alison Bishop – Development Planning
- Andy Miller – Strategic Planning and Transportation
- Becky Willson – Strategic Planning and Transportation
- Carl Mercer – Development Planning
- Claire Hammond – Strategic Planning and Transportation
- Ellen Blakey – Public Health
- Fiona Gee – Taxi Licensing
- Frances Howie (Interim Director of Public Health) – Public Health
- Hayley Insley – Development Planning
- Councillor Keith Allcock – Cabinet Member for the Environment and Highways
- Liann Brookes-Smith (Consultant in Public Health) – Public Health
- Lina Martino – (Consultant in Public Health) – Public Health
- Louise Bodlovic – Development and Road Safety
- Margaret Gardiner – Public Health
- Phil Kingston – Urban Regeneration
- Shane Middleton – Citizen and Consumer Protection, Environmental Health
- Sharon Lang – Highways – Development and Road Safety
- Simon Chadwick – Highway Network Development and Safety
- Suzy Street-Hall – Public Health
- Tina Okewale – Public Health

This AQAP was approved by Sandwell Council's Cabinet on Wednesday 10th December, 2025, and included:

Shokat Lal – Chief Executive of Sandwell Council

Councillor Kerrie Carmichael – Leader of Sandwell Council

Councillor Keith Allcock – Cabinet Member for Environment and Highways

Councillor Peter Hughes – Cabinet Member for Regeneration and Infrastructure

Frances Howie – Interim Director of Public Health

Alan Lunt – Executive Director - Place

This AQAP has been signed off by Frances Howie, Interim Director of Public Health.

The following Air Quality Partners / stakeholders have contributed to the development of the AQAP and will be committed to delivery of actions:

- Black Country Transport.
- British Cycling.
- Living Streets.
- National Highways.
- NHS Black Country Integrated Care Board.
- Sandwell and West Birmingham Hospitals NHS Trust.
- Transport for West Midlands; and
- West Midlands Combined Authority.

This AQAP will be subject to an annual review. Progress each year will be reported in the Annual Status Reports (ASRs) produced by Sandwell Council, as part of our statutory Local Air Quality Management duties.

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

Address: Pollution Control Team, Sandwell Council House, Freeth Street, Oldbury, B69 3DE

T**elephone:** 0121 569 2200

Email: pollution_control@sandwell.gov.uk

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1 Introduction

This report outlines the actions that Sandwell Council will deliver between 2025 and 2030 in order to reduce concentrations of air pollutants and exposure to air pollution; thereby positively impacting on the health and quality of life of residents and visitors to Sandwell. The purpose of the report is to set out how the local authority will exercise its functions in order to achieve the relevant air quality objectives.

It has been developed in recognition of the legal requirement on the local authority to achieve and maintain Air Quality Objectives 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 Plan will be reviewed every five years at the latest and progress on measures set out within this Plan will be reported on annually within Sandwell Council's air quality ASR.

2 Summary of Current Air Quality in Sandwell

2.1 Air Quality Management Areas

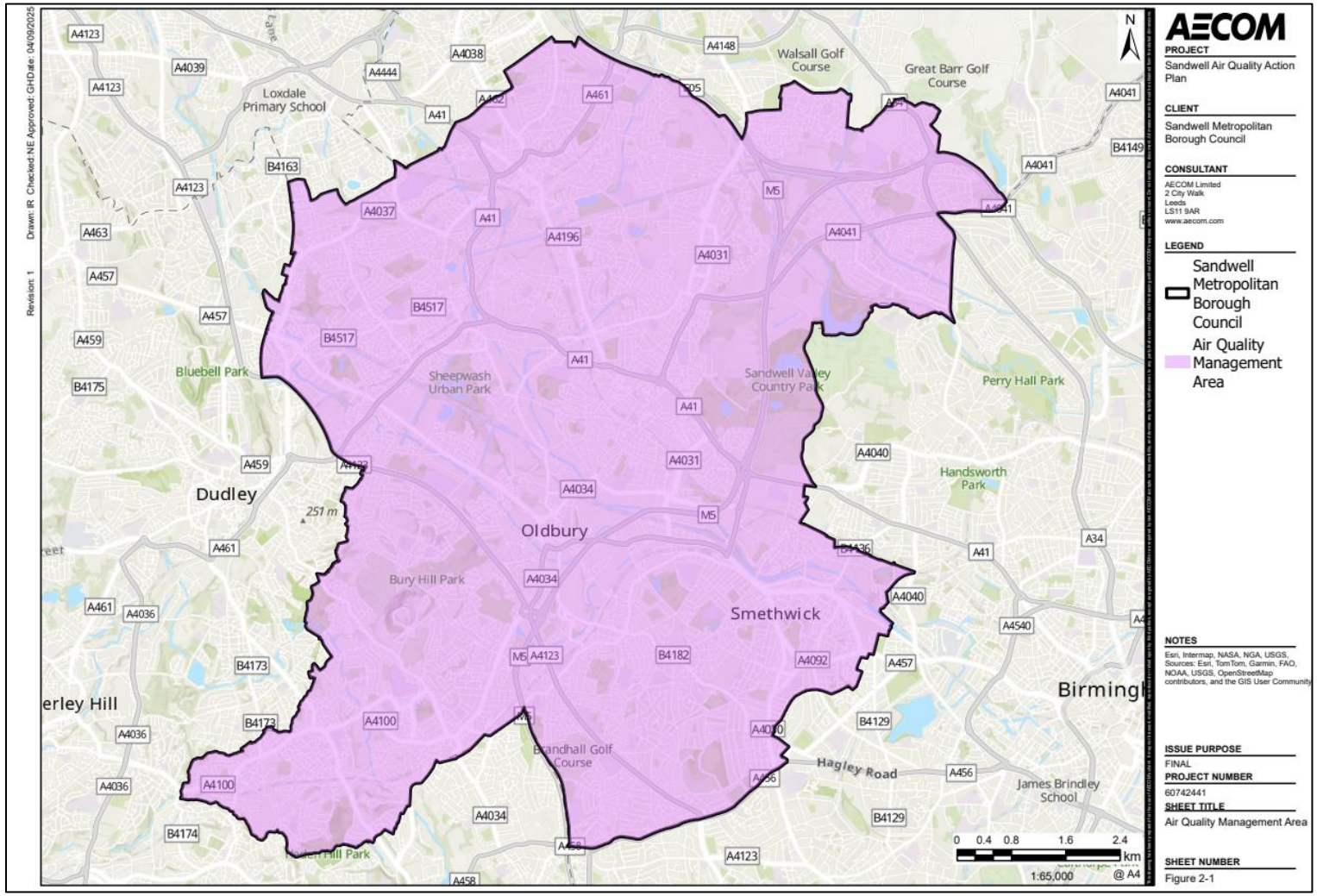
The relevant Air Quality Management Areas (AQMAs) addressed by this AQAP are outlined below.

One Air Quality Management Area (AQMA) has been declared by Sandwell Council for exceedances of the annual mean objective for nitrogen dioxide (NO_2) in 2005. This AQMA covers the entire Borough.

Table 2-1 – 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
Sandwell Air Quality Management Area	Sandwell AQMA Order 2005	NO_2 Annual Mean	An area encompassing the whole Borough of Sandwell.	YES	58.5 µg/m^3	34.7 µg/m^3	2 years (up to 2023)

Figure 2-1 Sandwell MBC Air Quality Management Area



2.2 Public Exposure

Sandwell has an estimated population of 347,551[4] living within the Borough-wide Air Quality Management Area (AQMA).

Sandwell is characterised by large industrial areas and a road network featuring major arterial roads including the M5 motorway which bisects the Borough and the M6 which runs along the eastern edge of the Borough.

While most residents are no longer exposed to nitrogen dioxide (NO_2) concentrations exceeding the UK annual air quality objective of 40 µg/m³, the majority are experiencing concentration levels significantly above the World Health Organisation (WHO) guideline of 10 µg/m³ per annum (in 2024 Sandwell had only one monitoring site, Haden Hill Park, which was within the WHO's guideline, at 9.6µg/m^3) and the WHO Interim Target 3, of 20 µg/m³ per annum.

Measured background concentrations of $PM_{2.5}$ at Sandwell's four air quality monitoring stations has ranged from 7 to 9 µg/m³ over the past four years with no clear evidence of a downward trend. While these levels remain below the UK Government's 2040 target of 10 µg/m³ per annum they are still significantly higher the World Health Organisation's health-based guideline of 5 µg/m³.

Although current air quality monitoring demonstrates that statutory limits for both NO_2 and $PM_{2.5}$ are currently being met, when assessed against international health-based standards exposure to air pollution continues to pose a serious threat to public health.

A more detailed summary of the current air quality (2024) in the Borough is provided below.

Sandwell operates a monitoring network comprising of five automatic monitoring analysers monitoring a range of pollutants including nitrogen dioxide (NO_2), particulate matter (PM_{10} and $PM_{2.5}$) and ozone (O_3). There are also 119 passive NO_2 diffusion tube monitoring sites across the Borough. In addition, Sandwell uses non-reference grade, low cost-air quality monitors, such as Zephyrs, to monitor potential air pollution hotspots and air quality at a more granular scale.

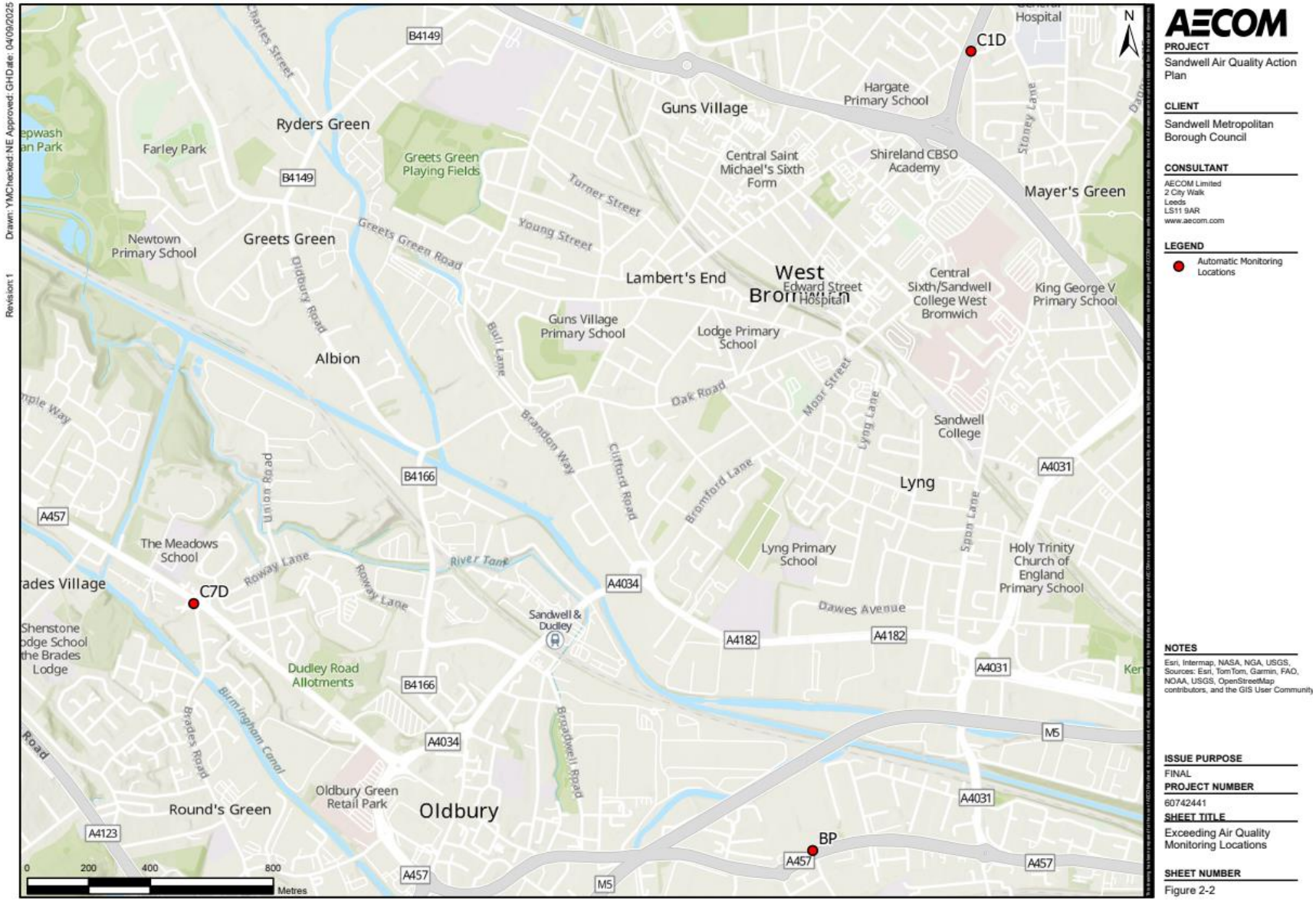
In 2024, there were two diffusion tubes (BP and C1D) which monitored NO_2 concentrations above the annual mean objective for NO_2 of 40 µg/m^3, and a further diffusion tube (C7D) within 10% of the annual mean objective for NO_2. These three sites are shown in Figure 2-2 and details of these three sites are provided alongside all additional monitoring sites which had a concentration exceeding 36.0 µg/m^3 in any year between 2020 and 2024 in Table 2-2 (36.0 µg/m^3 is the relevant threshold for determining compliance when using diffusion tube monitoring).

[4] https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates

Table 2-2 – Exceeding Air Quality Monitoring Locations

Location	ID	X, Y	Annual mean NO_2 concentration ($\mu g/m^3$)					
			2019	2020	2021	2022	2023	2024
Crossing Point opp. British Queen PH Birmingham Road B69 4EH	BE	399915, 289353	**47.9**	38.0	39.2	34.4	34.0	32.3
Telegraph Pole Birmingham Road B69 4EH	BP	400149, 289424	34.3	30.3	36.2	**44.5**	**44.0**	**41.4**
Crossing Point near JB Stores Grafton Road B71 4EB	C1D	400664, 292020	36.8	30.3	31.9	37.8	**41.4**	**42.3**
Downpipe Dudley Road East Oldbury B69 3EB	C7D	398136, 290226	29.2	28.9	35.7	36.9	36.3	36.0
Lamppost opp. 505 Hagley Road, Smethwick B66 4AX	C10D	402298, 286073	**44.1**	33.4	36.2	33.4	32.6	31.6
Downpipe Jinks Watch Shop High Street Blackheath B65 0EH	C12A	396899, 286438	**40.7**	34.3	36.6	34.9	34.1	32.4
Lamppost Black Country New Road West Bromwich B70 9LS	DB1, DB2, DB3	399508, 292068	39.9	35.2	37.4	35.0	32.4	34.6
A41 Lamppost near J1 M5 Birmingham Rd West Bromwich B71 4JQ	PC1, PC2, PC3	401950, 290355	**44.6**	38.1	**44.2**	39.6	34.0	33.5
Street Sign opp. 34 Newton Road Great Barr B43 6BW	ZR	404410, 294170	**42.0**	36.5	35.2	33.4	33.9	35.1
Bold text denotes exceedance of annual mean objective.								

Figure 2-2 – Exceeding Air Quality Monitoring Locations, 2024



In all cases above, the monitoring sites were located in kerbside or roadside locations, where the monitors were closer to the emissions source (the road) than the relevant exposure (the roadside residences). Compliance is based upon relevant exposure, so concentrations have been distance-corrected for all monitoring sites included within Table 2-2 to determine compliance.

An error was present in the 2023 and 2024 Annual Status Reports for the calculated concentration representative of relevant exposure for the monitoring site BP. This error has been rectified, and the correct concentrations are shown in Table 2-3 below.

Table 2-3 – Corrected "fall off with distance" calculations for BP

Year	Raw Annual Mean	Bias Adjusted Mean	Predicted at receptor following "fall off with distance" calculation	Incorrect "fall off with distance" value previously reported
2022	54.4	44.5	33.3	40.2
2023	53.1	44.0	32.7	39.8
2024	47.1	41.4	31.9	N/A

Table 2-4 shows the distance-corrected concentrations for all monitors in Table 2-2, including the corrected values described above. The last year in which a concentration above 36.0 µg/m^3 was recorded in Sandwell was 2021, when a concentration of 36.1 µg/m^3 was recorded at site BE. Sandwell AQMA has therefore been compliant with the Air Quality Objective for three years (2022 to 2024).

Table 2-4 – "Fall off with distance" Concentrations at Exceeding Air Quality Monitoring Locations

Location	ID	Annual mean NO_2 concentration (µg/m^3)					
		2019	2020	2021	2022	2023	2024
Crossing Point opp. British Queen PH Birmingham Road B69 4EH	BE	**43.7**	34.8	36.1	-	-	-
Telegraph Pole Birmingham Road B69 4EH	BP	-	-	33.7	33.3	32.7	31.9
Crossing Point near JB Stores Grafton Road B71 4EB	C1D	31.3	-	-	31.1	32.7	27.8

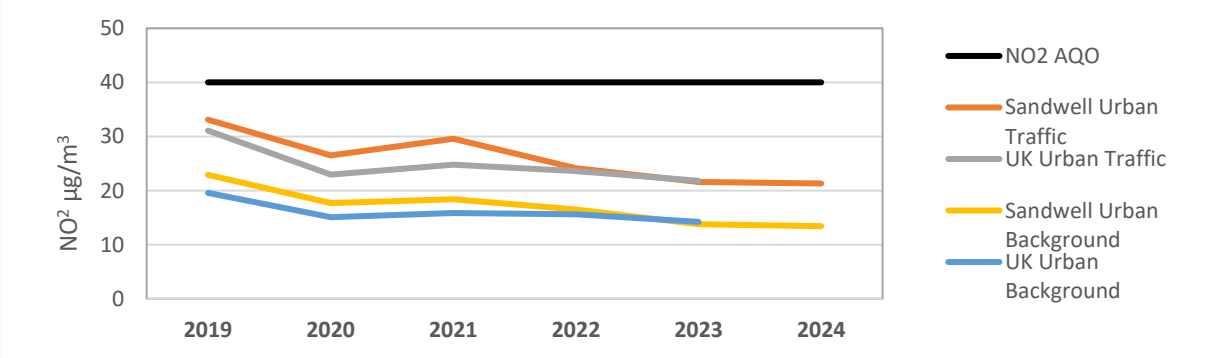
Location	ID	Annual mean NO_2 concentration ($\mu g/m^3$)					
		2019	2020	2021	2022	2023	2024
Downpipe Dudley Road East Oldbury B69 3EB	C7D	-	-	-	30.4	28.3	25.4
Lamppost opp. 505 Hagley Road, Smethwick B66 4AX	C10D	36.5	-	35.4	-	-	-
Downpipe Jinks Watch Shop High Street Blackheath B65 0EH	C12A	37.0	-	32.6	-	-	-
Lamppost Black Country New Road West Bromwich B70 9LS	DB1, DB2, DB3	34.2	-	31.1	-	-	-
A41 Lamppost near J1 M5 Birmingham Rd West Bromwich B71 4JQ	PC1, PC2, PC3	33.2	28.6	35.0	32.3	-	-
Street Sign opp. 34 Newton Road Great Barr B43 6BW	ZR	35.1	30.2	-	-	-	-
Bold text denotes exceedance of annual mean objective. Dashes have been included where distance correction was not required as monitored concentrations were <36 $\mu g/m^3$.							

The following trend analysis discussion covers 2019–2024. National comparator datasets for 2024 (UK urban traffic/background) were not available at the time of reporting; therefore, UK comparisons are shown up to 2023, while data from Sandwell includes 2024.

Nitrogen Dioxide (NO_2)

Annual mean NO_2 concentrations in Sandwell continued to decline into 2024, with no exceedances of the national objective (40 $\mu g/m^3$) at any monitoring location. The borough maintains an extensive network of 119 diffusion tube sites (with triplicates at 22 sites) underpinning these findings. A previously reported exceedance in 2022–2023 was confirmed as a fall-off-with-distance calculation error, and borough-wide compliance was maintained during this period. Figure 2.3 summarises the trend (comparison with UK only available until 2023).

Figure 2-3 – Annual Mean NO_2 Concentration Trends at all Monitoring Sites in Sandwell 2019 – 2024

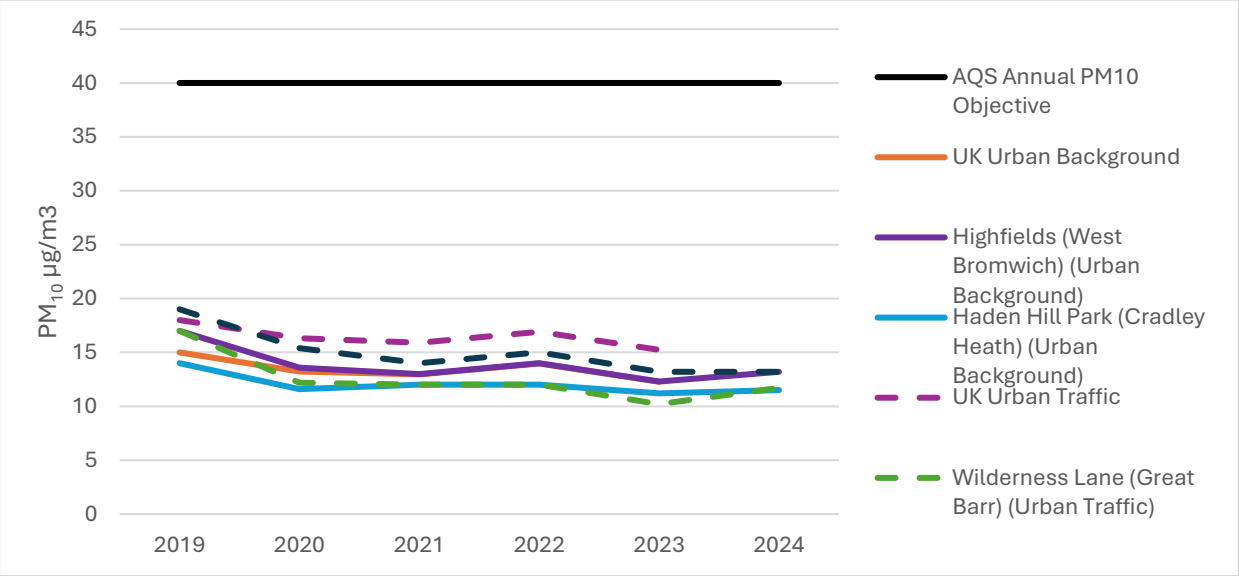


Since 2019, only six of the 119 diffusion tube monitoring sites in Sandwell have not followed the UK trend and have observed increases in annual mean NO_2 concentrations, in 2023, three of these sites remain above or within 10% of the national objective prior to distance correction to representative locations. These are BP, C1D and C7D which are located on a dual carriageway close to a roundabout, by a dual carriageway with pedestrian-controlled traffic lights and by a busy roundabout on the A457 Dudley Road respectively. All these locations have significant amounts of braking and acceleration which contributes to the elevated concentrations. The remaining 95% of sites demonstrate decreases in NO_2 concentration since 2019.

Particulate Matter (PM_{10})

Within the AQMA, PM_{10} annual mean concentrations remained well below the 40 µg/m^3 objective throughout 2019–2024. At urban traffic sites, Birmingham Road recorded 13.2 µg/m^3 in 2024 (unchanged from 2023), while Wilderness Lane increased by 1.5 µg/m^3 to 11.7 µg/m^3. At urban background sites, annual means rose slightly from 2023 to 2024: +0.9 µg/m^3 at Haden Hill and +0.3 µg/m^3 at West Bromwich. UK comparators are shown up to 2023; Sandwell generally tracked ~2 µg/m^3 below the UK urban traffic average prior to 2024. Figure 2.4 summarises these trends.

Figure 2-4 – Annual Mean PM_{10} Concentration Trends at all Monitoring Sites in Sandwell 2019 – 2024

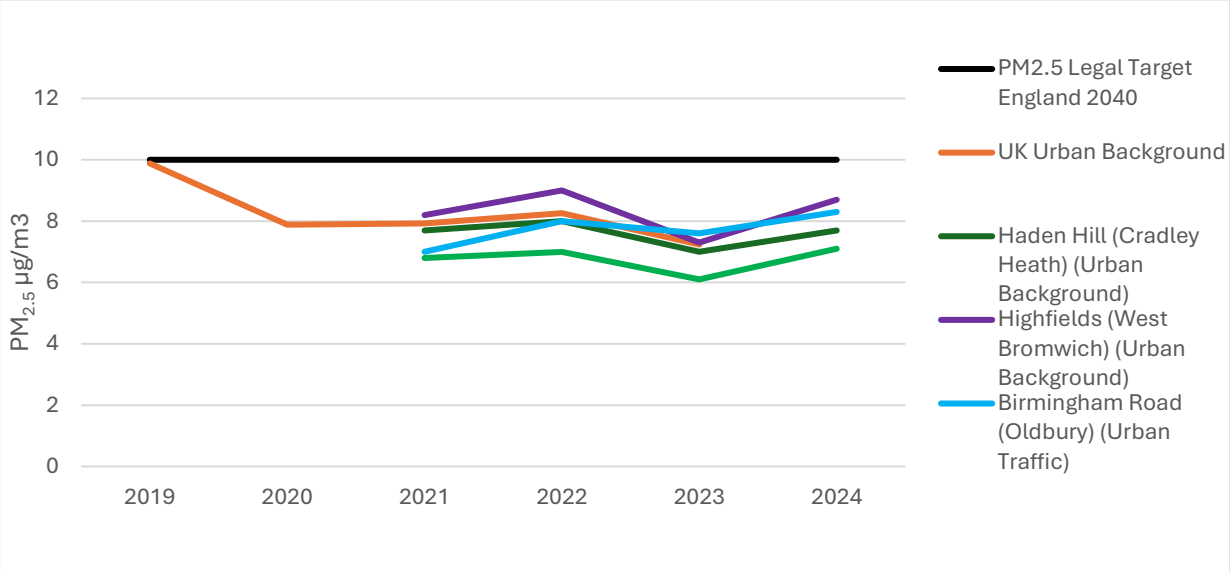


Particulate Matter ($PM_{2.5}$)

There is no evidence of a consistent trend in $PM_{2.5}$ concentrations in Sandwell between 2019 and 2024 (see Figure 2-5), with concentrations fluctuating from year to year. Urban traffic sites remain broadly aligned with or slightly below UK averages (data available to 2023) with an uptick in 2024, while urban background sites also

recorded increases between 2023 and 2024: Haden Hill (7.0 to 7.7 µg/m³) and Highfields (+1.4 µg/m³; ≈19%).

Figure 2-5 – Annual Mean $PM_{2.5}$ Concentration Trends at all Monitoring Sites in Sandwell 2019 – 2024



Although annual mean $PM_{2.5}$ concentrations remain below the national target of 10 µg/m³ by 2040, there is no safe threshold for particulate matter. To effectively protect public health, we should aim for significantly lower levels, ideally below 5 µg/m³, in line with emerging international best practice and WHO guidelines.

Zephyr Air Quality Monitor Data

In addition to diffusion tube and reference grade automatic monitoring, Sandwell also deployed a network of 21 Zephyr sensors until October 2024. These provided near real time air pollution monitoring at a more granular level. In 2023, all data from the Zephyr sensors demonstrated compliance with the current annual mean national objectives for NO_2, PM_{10} and $PM_{2.5}$. The highest reported NO_2 concentrations were 29.6 and 29.4 µg/m^3 on High St, Smethwick and the Birmingham Road, West Bromwich respectively. The highest reported PM_{10} concentrations were 14.5 and 13.4 µg/m^3 on Gospel Oak Road, Tipton and Bull Street, West Bromwich respectively. The highest reported $PM_{2.5}$ concentration was 7.5 µg/m^3 at Gospel Oak Road, Tipton and at High Street Cradley Heath. These provide further evidence for concentrations remaining below the relevant objectives and targets.

2.3 Comparison to Wider Region

On 1st June 2021, Birmingham City Council launched a Class D Clean Air Zone (CAZ).[5] A CAZ is an area where targeted action is taken to improve air quality, by discouraging the most polluting vehicles from entering. Birmingham's Class D CAZ operates within the A4540 Middleway, but not on the ring road itself. The CAZ is enforced 24 hours a day, 365 days a year, and any vehicles that do not meet the following emissions standards are charged a daily fee:

- Euro 4 or higher for petrol cars or vans
- Euro 6 or higher for diesel cars and vans
- Euro VI or higher for lorries, buses and coaches.

The southeast of Sandwell Borough is located less than 2 km from the northeastern edge of the CAZ.

Prior to the launch of the CAZ, there was concern in Sandwell that there would be a "displacement" of vehicles from within the city centre to the ring road[6] and beyond into the West Midlands thereby increasing through traffic passing through Sandwell. However based on the vehicle numbers observed, this risk does not appear to have materialised as there has been no increase in vehicle numbers on the ring road[7].

Additionally, concerns were raised about the potential impact on Sandwell's air quality.[8] Figure 2-6 shows the comparison between all monitoring sites across Sandwell Borough and Birmingham City from 2019 through 2023 (based on available data at the time of writing this report). No sizeable increase was seen in the Sandwell monitoring concentrations following the implementation of the CAZ in June 2021 and the rate of change in concentrations broadly matches that seen in the Birmingham monitoring sites for both automatic and diffusion tube monitoring sites. Between 2019 and 2023, average pollutant concentrations at diffusion tube monitoring sites declined by 17.5% in Sandwell and by 17.0% in Birmingham. However, individual site changes ranged widely, from a 28.3% increase to a 40.5% decrease in Sandwell, and from a 17.6% increase to a 31.0% decrease in Birmingham. At automatic monitoring sites over the same period, Sandwell recorded an average reduction of 25.8%, with decreases ranging from 15.2% to 34.0%. In Birmingham, the average reduction was slightly higher at 26.6%, with site-specific decreases ranging from 6.3% to 37.4%.

[5] Birmingham City Council Clean Air Zone Air Quality and Road Traffic Update Report 2023

[6] https://sandwell.moderngov.co.uk/Data/Health%20and%20Adult%20Social%20Care%20Scrutiny%20Board/201901211730/Agenda/05a%20-%20Air%20Quality%20Scrutiny%20Panel%20presentation.pdf

[7] Birmingham CAZ report 2023

[8] https://sandwell.moderngov.co.uk/Data/Health%20and%20Adult%20Social%20Care%20Scrutiny%20Board/201901211730/Agenda/05a%20-%20Air%20Quality%20Scrutiny%20Panel%20presentation.pdf

Figure 2-7 shows the concentrations at just the roadside sites in Sandwell and Birmingham (excluding background and other site types). Both areas show broadly the same trends with reductions of approximately 6 – 10 µg/m^3 from 2019 to 2023. There was an average reduction of 16.8% across roadside sites in Sandwell from 2019 to 2023 and 16.9% in Birmingham. These two figures show that the CAZ does not appear to have had a negative impact on air quality in Sandwell.

Figure 2-6 – Annual Mean NO_2 Concentrations at All Monitoring Sites in Sandwell and Birmingham from 2019 to 2023 (µg/m^3)

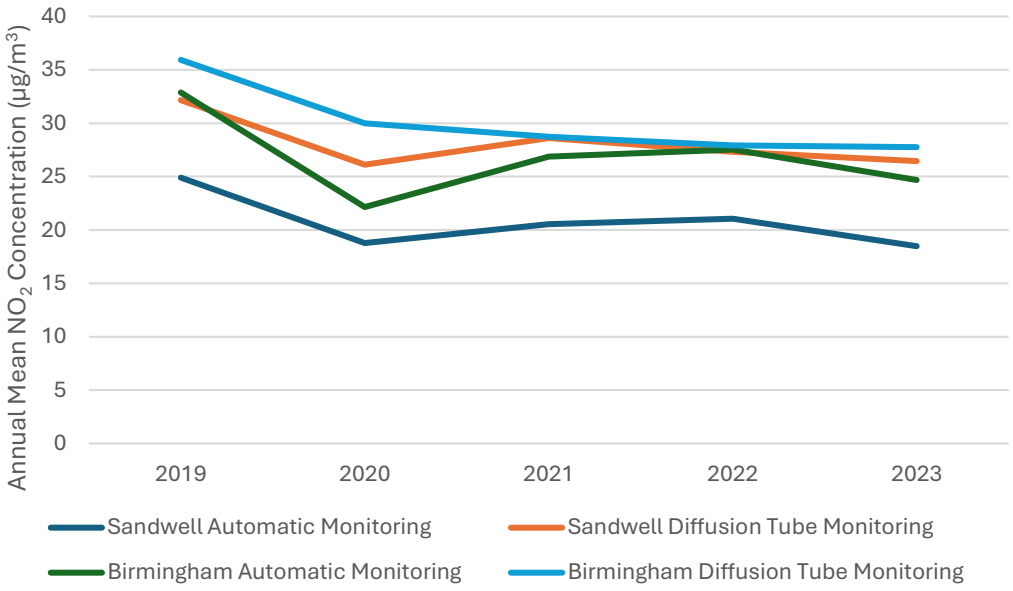
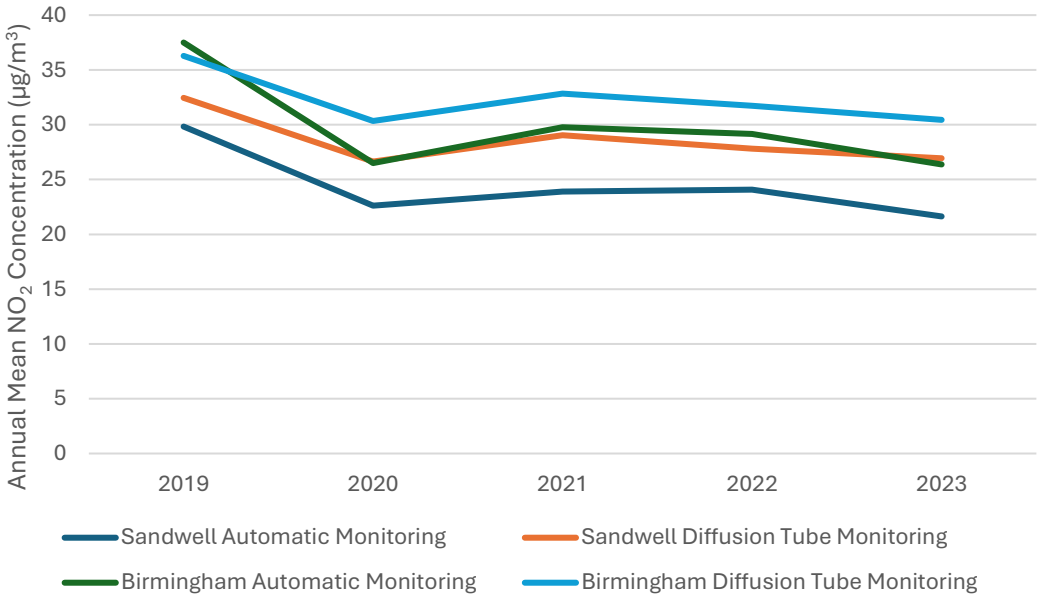


Figure 2-7 – Annual Mean NO_2 Concentrations at Roadside Monitoring Sites in Sandwell and Birmingham from 2019 to 2023 (µg/m^3)



2.4 Smoke Control Areas

Sandwell has one smoke control area covering the whole Borough[9] which was declared in February 2022 and came into operation on 1st July 2024. A smoke control area is an area where people and businesses must not emit smoke from a chimney or buy or sell unauthorised fuel for use in a smoke control area unless it is used in an 'exempt' appliance (an appliance which has been approved for use in a smoke control area)[10].

2.5 Industrial Emissions

Within Sandwell there are 39 installations operating under Part A1 (Environment Agency regulated) Environmental Permit[11] and 98 installations operating under Part A2 or Part B (locally regulated) Environmental Permit. These include industries such as food, power, metals, chemicals, and waste disposal. Permit holders must comply with the terms of their environmental permit. This may cover elements such as the design of the facility (to avoid and control emissions using best available techniques), carrying out a risk assessment to identify potential emissions, operating a management system to minimise the identified risks of pollution, and enacting appropriate measures based upon the type of activity (for example the use of specific pieces of equipment or monitoring strategies).

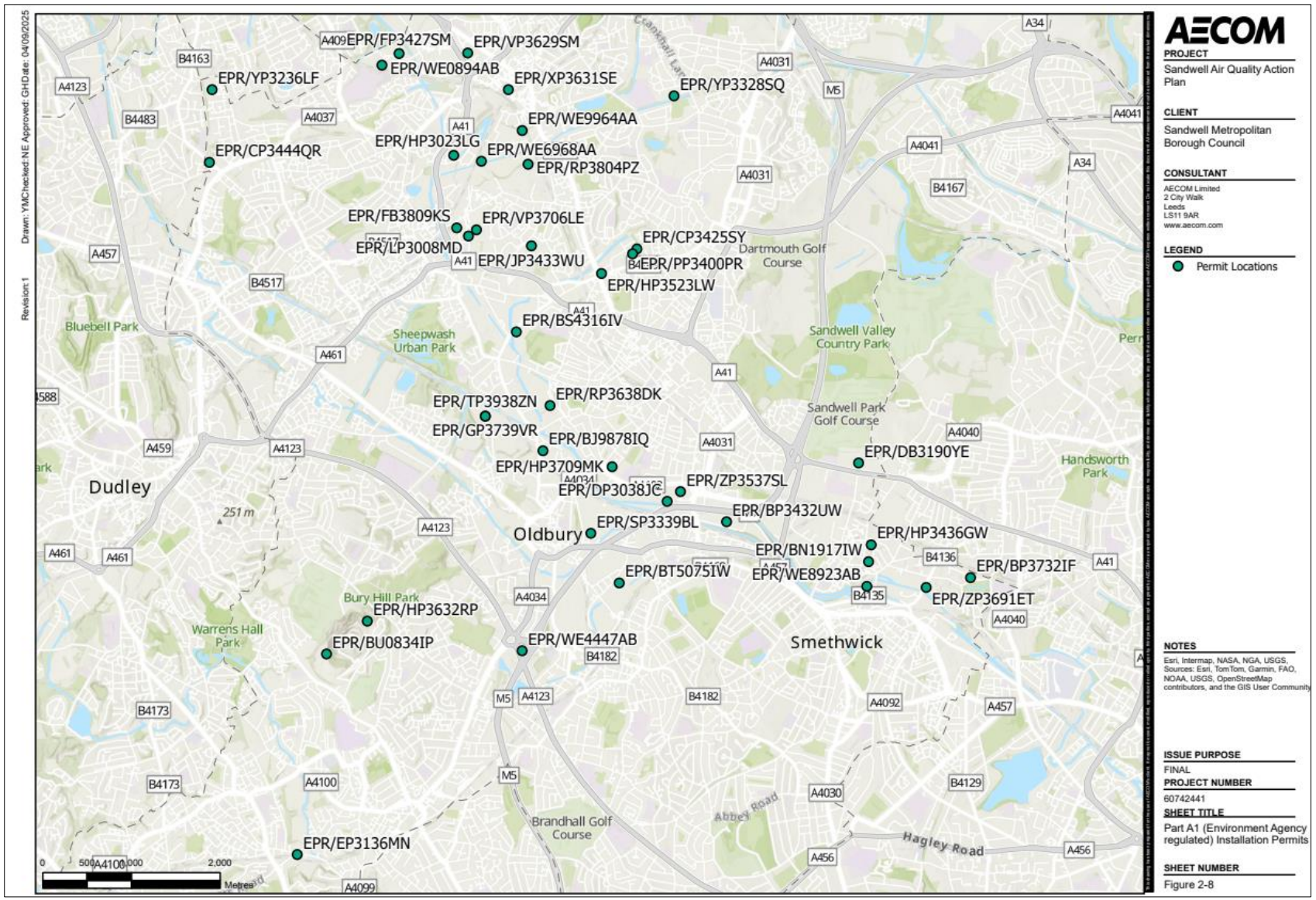
Figure 2-8 shows the regional distribution of the 39 installations operating under Part A1 (Environment Agency regulated) Environmental Permits. In comparison to the rest of the Black Country and the West Midlands, Sandwell has a much higher number of regulated activities. There are 45 installations operating under Part A1 Environmental Permits across the rest of the Black Country along with 47 in Birmingham, five in Solihull and 12 in Coventry.

[9] The Borough Council of Sandwell Smoke Control Order 2022

[10] https://uk-air.defra.gov.uk/sca/

[11] https://environment.data.gov.uk/public-register/industrial-installations/registration?easting=&northing=&name-search=&number-search=&local-authority=Sandwell&address-search=&__postcode=&dist=1

Figure 2-8 – Part A1 installation permits in Sandwell



3 Sandwell Council's Air Quality Priorities

3.1 Public Health Context

Air pollution is the largest environmental risk to public health in the UK[12] and can cause and worsen health effects, particularly in the most vulnerable groups of society including children, the elderly, individuals with existing cardiovascular or respiratory diseases, pregnant women and low-income communities.

The Public Health Outcomes Framework (PHOF), underpinned by the Office for Health Improvement & Disparities (OHID) 'Fingertips data'[13], identifies $PM_{2.5}$ as a key indicator of mortality. This measure reflects the mortality burden associated with long-term exposure to fine particulate matter and is expressed as the percentage of annual deaths from all causes among people aged 30 and over.

In Sandwell, the fraction of mortality attributable to particulate air pollution in 2023 was 5.9%, which is slightly higher than the England average of 5.2%. Sandwell also records the highest mortality fraction in the West Midlands, tied with Walsall, and exceeds the regional average of 5.6%. Updates on how Sandwell compares on both a regional and national level are also provided in our Annual Status Air Quality Reports[14].

Sandwell has an estimated population of 347,551[15] living within the Borough and the AQMA in mid-2023. 22% of the population is estimated to be aged 0 – 15, which is higher than the England and West Midlands averages of 18% and 19% respectively. Whereas the proportion of the population estimated to be over 65 is 15%, which is lower than the proportions for England and the West Midlands of 19%. These are two of the most vulnerable population groups where air pollution can cause and worsen health effects.[16]

Hospital admissions during 2021/22 for asthma in children and young people under 19 years old were notably higher in Sandwell than in England and the West Midlands.[17] There were 207.4 admissions per 100,000 in 2021/22 in Sandwell compared to 165.6 for West Midlands and 131.5 for England. The higher admission rate for children in Sandwell may reflect the larger proportion of children ages 0 – 15 in Sandwell compared to England and the West Midlands as well as the air pollution burden in Sandwell.

[12] https://www.gov.uk/government/publications/air-pollution-applying-all-our-health/air-pollution-applying-all-our-health

[13] Department of Health and Social Care: https://fingertips.phe.org.uk/search/concentration

[14] https://www.sandwell.gov.uk/downloads/download/1048/air-quality-annual-status-reports

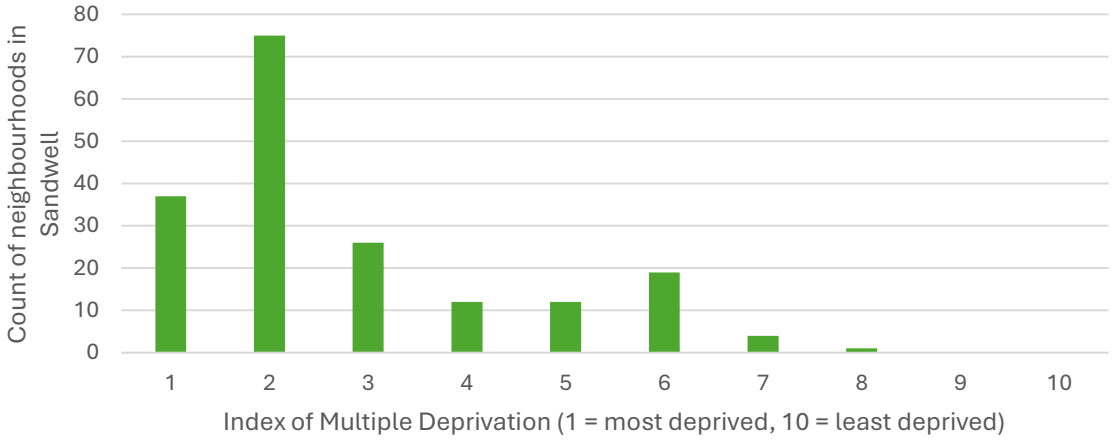
[15] https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates

[16] https://www.gov.uk/government/publications/air-pollution-applying-all-our-health/air-pollution-applying-all-our-health

[17] https://www.sandwelltrends.info/wp-content/uploads/sites/5/2024/09/JSNA-Chapter-2b-Grow-Well-Apr-24.pdf

Indices of Multiple Deprivation (IMD) 2019 shows Sandwell's average deprivation score ranked as the 12th most deprived local authority (LA) in England, out of 317 LAs. 186 of England's 32,844 Lower Super Output Areas (LSOA) are in Sandwell and 20% of these LSOAs fell into the most deprived 10% nationally in 2019 and a further 40% fell into the most deprived 10-20%. Overall, 60% of Sandwell's LSOAs fell into the worst 20% nationally, and only 3% into the 40% least deprived nationally.[18] The high levels of deprivation prevalent across large parts of the Borough may indicate increased vulnerability to the effects of air pollution. Figure 3-1 shows the distribution of IMD indices in Sandwell.[19]

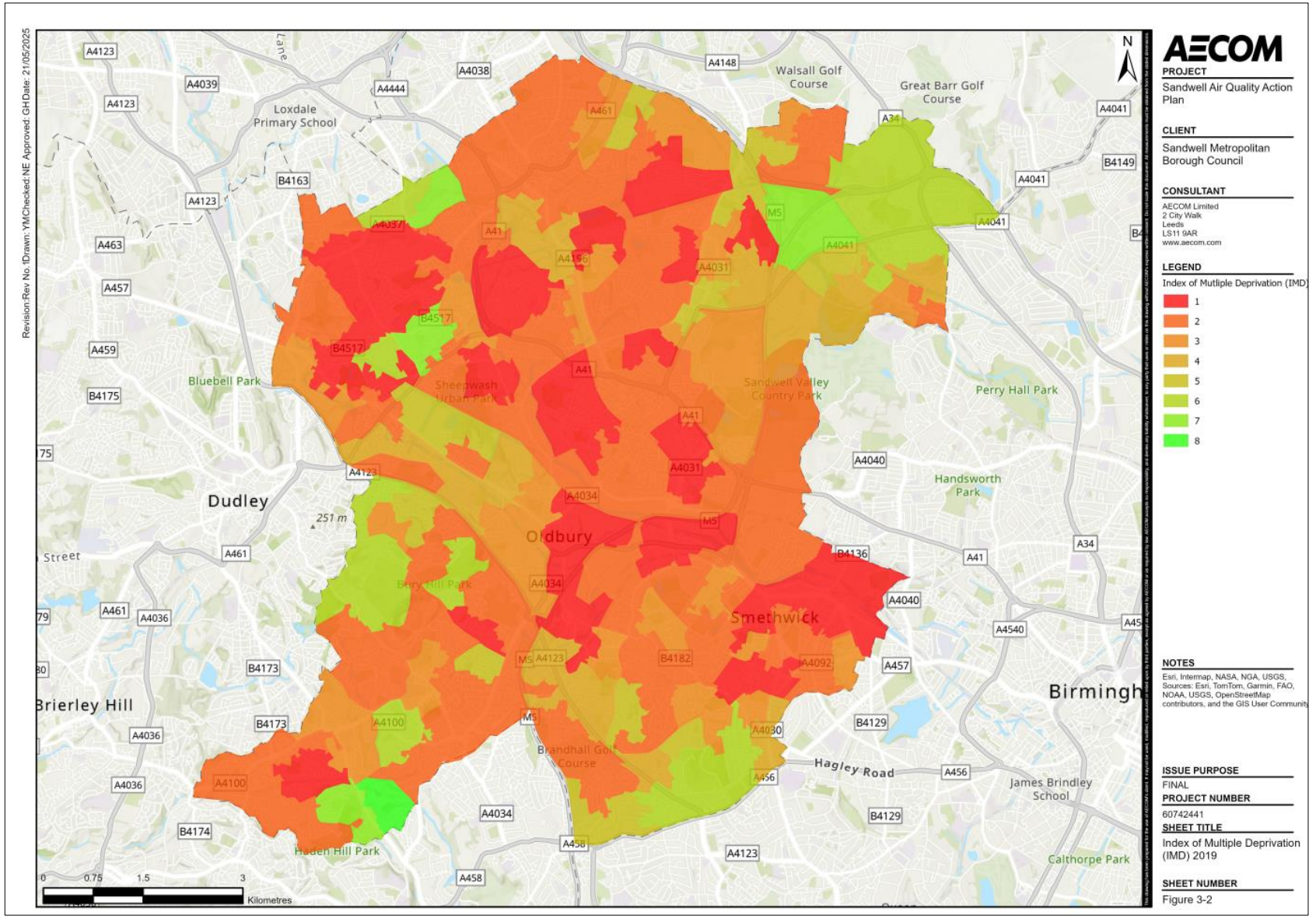
Figure 3-1 – Distribution of Lower Super Output Areas in Sandwell across the Indices of Multiple Deprivation



[18] https://www.sandwelltrends.info/deprivation_west_midlands_context/ accessed 13/03/2025

[19] https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019 File 1: Index of multiple deprivation

Figure 3-2 – Indices of Multiple Deprivation in Sandwell

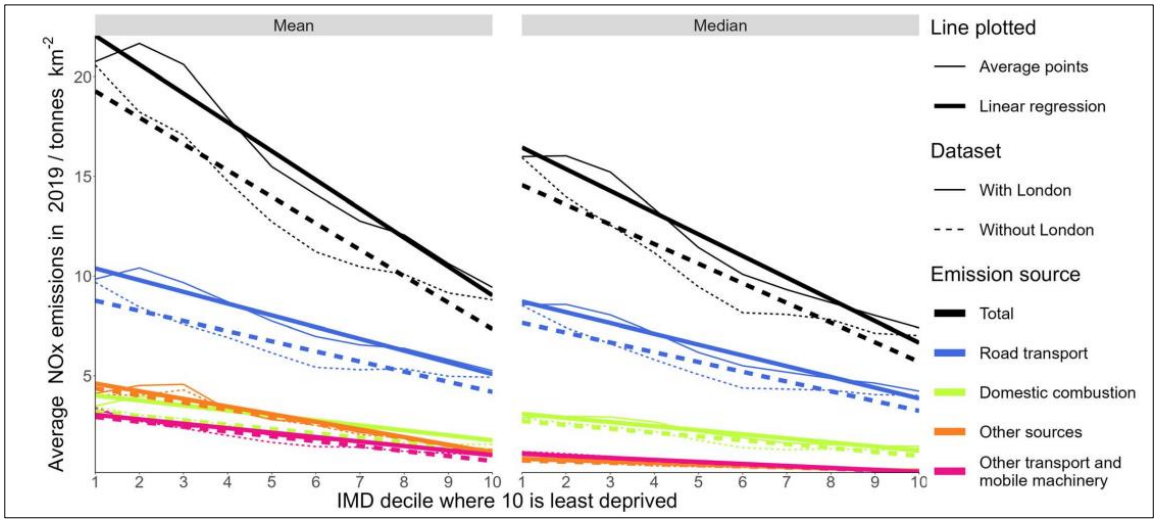


Nationally, the least deprived decile experienced on average 44 – 57% less median annual NO_X emissions compared to most deprived decile, not just for road transport[20].

Figure 3-3 shows the change in emissions by deprivation decile for different source sectors, it shows that all source sectors shown decrease by at least 25% when going from the most to least deprived deciles. It is estimated that at least 66% of counties or Unitary Authorities in England have significant deprivation-based inequality in NO_X emissions and more deprived regions are more likely to experience higher pollutant emissions.

Road transport and domestic wood burning have been identified as the two UK sectors which contribute most significantly to the $PM_{2.5}$ exposure differentials in England when evaluated using the IMD, as their contributions increase in more deprived areas.[21]

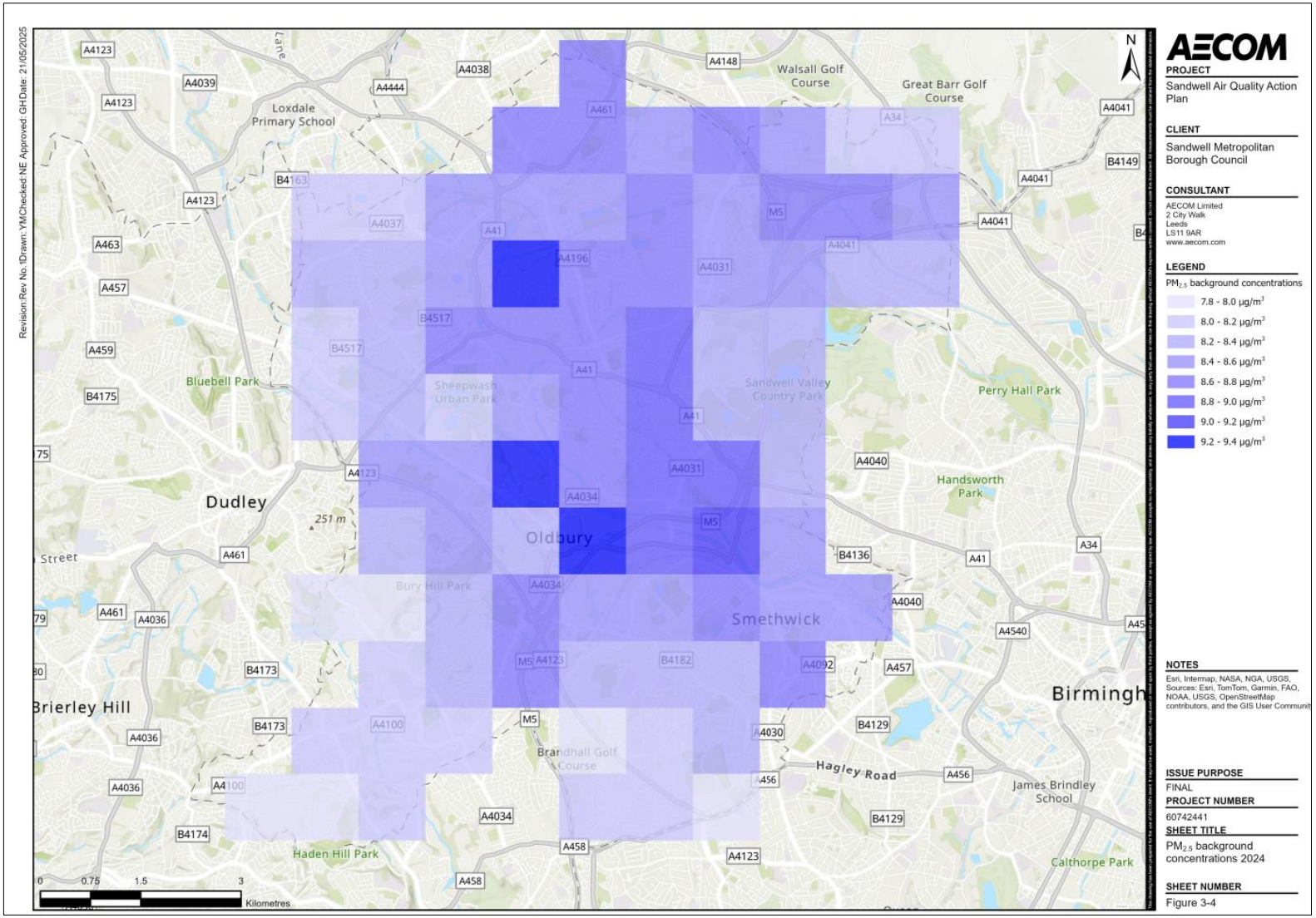
Figure 3-3 – The mean and median emissions of NO_X by LSOA across England for major source sectors.



[20] https://uk-air.defra.gov.uk/assets/documents/reports/cat05/2503251005_AQEG_Differentials_clean_280824.pdf

[21] https://uk-air.defra.gov.uk/assets/documents/reports/cat05/2503251005_AQEG_Differentials_clean_280824.pdf (this point is refencing Woodward et al (2024) in the Defra report - Woodward, H., Oxley, T., Holland, M., Mehlig, D., and ApSimon, H.: Assessing PM2.5 exposure bias towards deprived areas in England using a new indicator. Environmental Advances, 16, 100529, 2024. doi.org/10.1016/j.envadv.2024.100529)

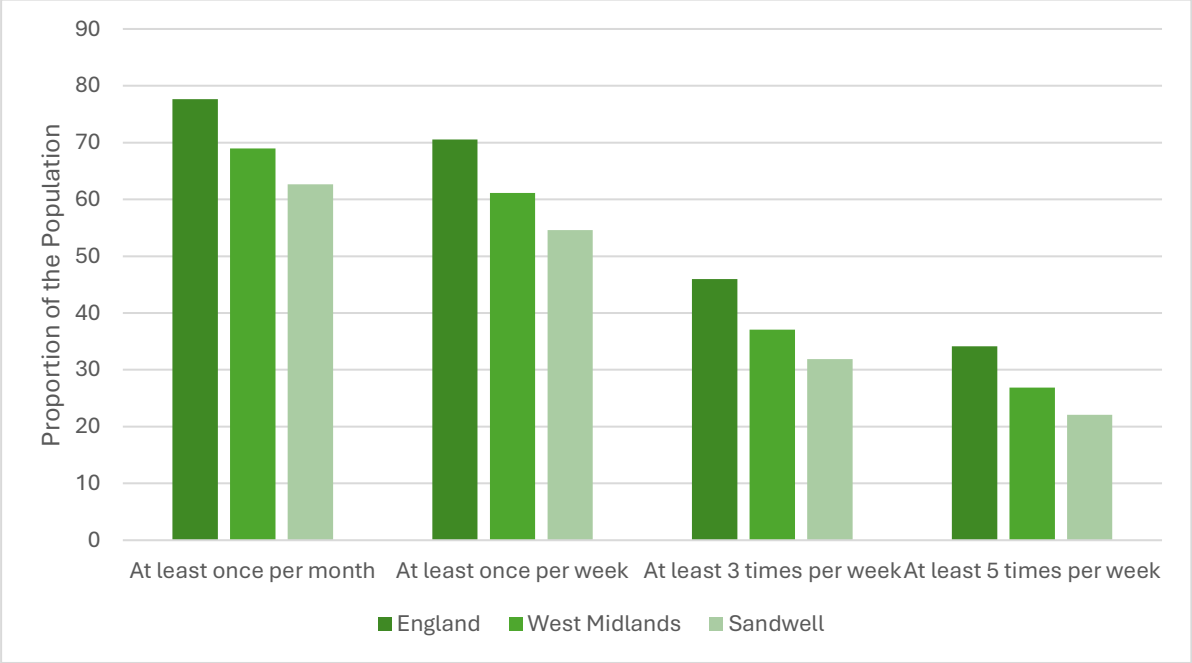
Figure 3-4 – Background $PM_{2.5}$ Concentrations in Sandwell



*The category "Other sources" is the combination of the source sectors: agricultural; energy production; industrial combustion; solvents; natural and point sources.[22]

Data from the Active Lives Survey and National Travel Survey have been utilised to compile a data set on walking and cycling in England.[23] Data from 2020 to 2023 shows the percentage of the population who walked for over 10 minutes or cycled any length or distance for any reason in different time periods. Figure 3-5 shows the averages across all four years for England, the West Midlands and Sandwell. Across all four time periods considered, the proportion of the population of Sandwell who walked or cycled is 19 – 35% lower than the whole of England, and 9 – 18% lower than the West Midlands.

Figure 3-5 – Average proportion of the population who walked over 10 minutes or cycled any length or duration across different time periods, from 2020 – 2023.[24]



The 2021 census found that over 50% of all Sandwell residents in employment travel to work by car or van (52.9%).[25] However, these data were taken during the COVID-19 pandemic which may affect uptake of public transport or active travel or the proportion of the population travelling to work compared to working from home. Therefore, these statistics are indicative only.

In 2021, 29.2% of Sandwell households do not have access to a car or van, this is higher than the average for England and Wales of 23.3% in 2021. However, it is

[22] Gray et al 2023 https://pubs.rsc.org/en/content/articlelanding/2023/va/d3va00054k

[23] https://www.gov.uk/government/statistical-data-sets/walking-and-cycling-statistics-cw (from tab CW0307)

[24] https://www.gov.uk/government/statistical-data-sets/walking-and-cycling-statistics-cw accessed 31/3/25

[25] https://www.sandwelltrends.info/education-and-economic-activity/ accessed 24/4/25

lower than the value of 33.9% for Sandwell in the 2011 census, indicating increasing car ownership over time. In West Bromwich Central and Soho & Victoria wards, the car ownership rate falls below 60%.[26]

3.2 Planning and Policy Context

The air quality action plan exists within a comprehensive network of planning and policy documents on a local, regional, and national scale, which work together to contribute towards improvements in air quality in Sandwell. A list of relevant policy is provided in Table 3-1 below, considering air quality specific policy, planning policy, transport policy (which has a key impact on air quality due to the sector's contribution to emissions), and climate policy (which often has co-benefits for air quality as actions to reduce CO_2 emissions also reduce NO_2 and PM emissions).

Table 3-1 – Summary of Relevant Policy

Topic	Local Policy	Regional Policy	National Policy
Air Quality	Sandwell AQAP (this document)	West Midlands Combined Authority (WMCA) Air Quality Framework and Implementation Plan	Environment Act 2021 Clean Air Strategy (2019) Air Quality Strategy (2023)
Planning	Emerging Sandwell Local Plan	Black Country Core Strategy (to be superseded by Emerging Sandwell Local Plan) Black Country Air Quality Supplementary Planning Document WMCA Good Practice Air Quality Planning Guidance	National Planning Policy Framework (2025)
Transport	Sandwell Cycling and Walking Infrastructure Plan Sustainable Modes of Travel Strategy for Schools in Sandwell	West Midlands Strategic Transport Plan (to be superseded by Emerging West Midlands Local Transport Plan) Emerging West Midlands Local Transport Plan Black Country Ultra Low Emission Vehicle (ULEV) Programme Black Country Walking and Cycling Strategy	Emerging Integrated National Transport Strategy

[26] https://www.sandwelltrends.info/wp-content/uploads/sites/5/2023/04/Sandwell-Census-Profile-2021.pdf accessed 24/4/25

Topic	Local Policy	Regional Policy	National Policy
		and Implementation Plan West Midlands Local Cycling and Walking Infrastructure Plan	
Climate	Sandwell Climate Change Strategy Sandwell Corporate Climate Change Strategy	West Midlands Net Zero 5 Year Plan	Net Zero Strategy: Build Back Greener (2021)

All policies described in Table 3-1 are described in detail in **Appendix D**. Items of specific note are:

- Sandwell plays an active role in several working groups under the West Midlands Combined Authority (WMCA) Air Quality Framework, which aims to drive forward regional improvements in air quality. Given Sandwell's central location within the West Midlands, regional initiatives are expected to have a direct and positive impact on local air quality. The Framework has also served as a valuable reference in shaping the actions outlined in this Air Quality Action Plan (AQAP), helping to ensure alignment with broader regional objectives.
- The Sandwell Local Plan, this document is currently in draft but includes Policy SHW3: Air Quality, which aims to address poor air quality across the borough. A range of measures to achieve this aim are included. The Policy requires Air Quality Assessments to be carried out where development is proposed in areas where air quality does not meet objectives, or where significant air quality impacts are likely to be generated from the proposed development; and for all development, holistic measures will be taken to ensure good air quality including the integration of cycling, walking, public transport and electric charging points; promoting modal shift from cars to alternatives, measures related to energy generation, and the provision of green spaces.
- The Local Transport Plan is currently emerging but focuses on six thematic areas for action: behaviour change; accessible and inclusive places; walk, wheel, cycle and scoot; public transport and shared mobility; a safe efficient, and reliable transport network; and a green transport revolution. Many of these thematic areas are closely associated with air quality improvements, by way of a modal shift from cars to alternatives. The Black Country Area Strategy (a sub-strategy of the LTP) has not yet been published.

3.3 Source Apportionment

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

A source apportionment exercise was carried out by Sandwell Council in 2025.

NO_2 source apportionment was carried out following LAQM.TG (22) guidance at the location with the highest NO_2 concentration in the Borough (monitoring site BP) using traffic count data for the Birmingham Road for 2023 and ANPR fleet analysis data, alongside background pollutant concentration data from Defra.

Additionally, source apportionment was carried out for PM_{10} and $PM_{2.5}$ at the Birmingham Road (Oldbury) continuous monitoring site. This site measured the highest concentrations of PM_{10} and $PM_{2.5}$ in the Borough in 2023.

Full details of the source apportionment exercise and its outcomes are summarised below.

3.3.1 Automatic Number Plate Recognition Analysis

An Automatic Number Plate Recognition (ANPR) survey was undertaken in Sandwell on All Saints Way, West Bromwich, in November 2022, specifically to inform an air quality assessment on the impacts of speed limit changes on that road[27]. Data was cross-referenced with the DVLA database to obtain the fleet breakdown by Euro classification. The Euro classification is based on the vehicle age and reflects compliance with increasingly stringent emissions standards in newer vehicles and is therefore directly related to the emissions produced by the fleet.

For the source apportionment study for this AQAP, this ANPR study has been assumed to be representative of the wider vehicle fleet in Sandwell in 2022. Where the ANPR records did not include counts of specific vehicles, such as taxis, hybrid buses and conventional/hybrid coaches, then the Euro classification for these vehicle types was based on the default data in Defra's Emissions Factors Toolkit (EFT) v13[28], which is the standard tool for emissions modelling in the UK. EFT v13 also contains a fleet projection tool which was used to project the 2022 ANPR-derived fleet to 2023. The 2022 ANPR-derived fleet is compared to the default EFT v13 fleet in Figure 3-6 and Figure 3-7.

[27] A4031 All Saints Way Vissim Modelling. Available at: https://www.sandwell.gov.uk/downloads/file/2595/all-saints-way-a4031-modelled-impact-of-speed-reduction-on-air-quality

[28] https://laqm.defra.gov.uk/air-quality/air-quality-assessment/emissions-factors-toolkit/

Figure 3-6 – Car Euro Classification, ANPR and EFTv13, 2022

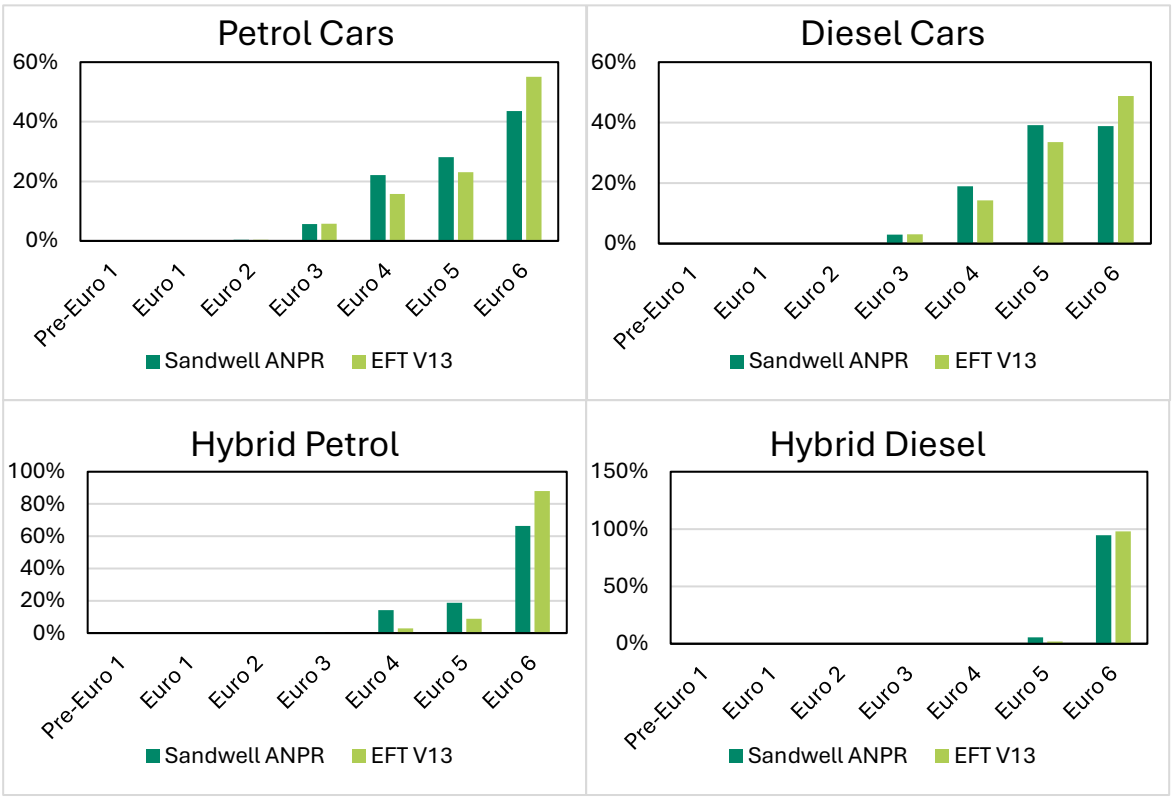
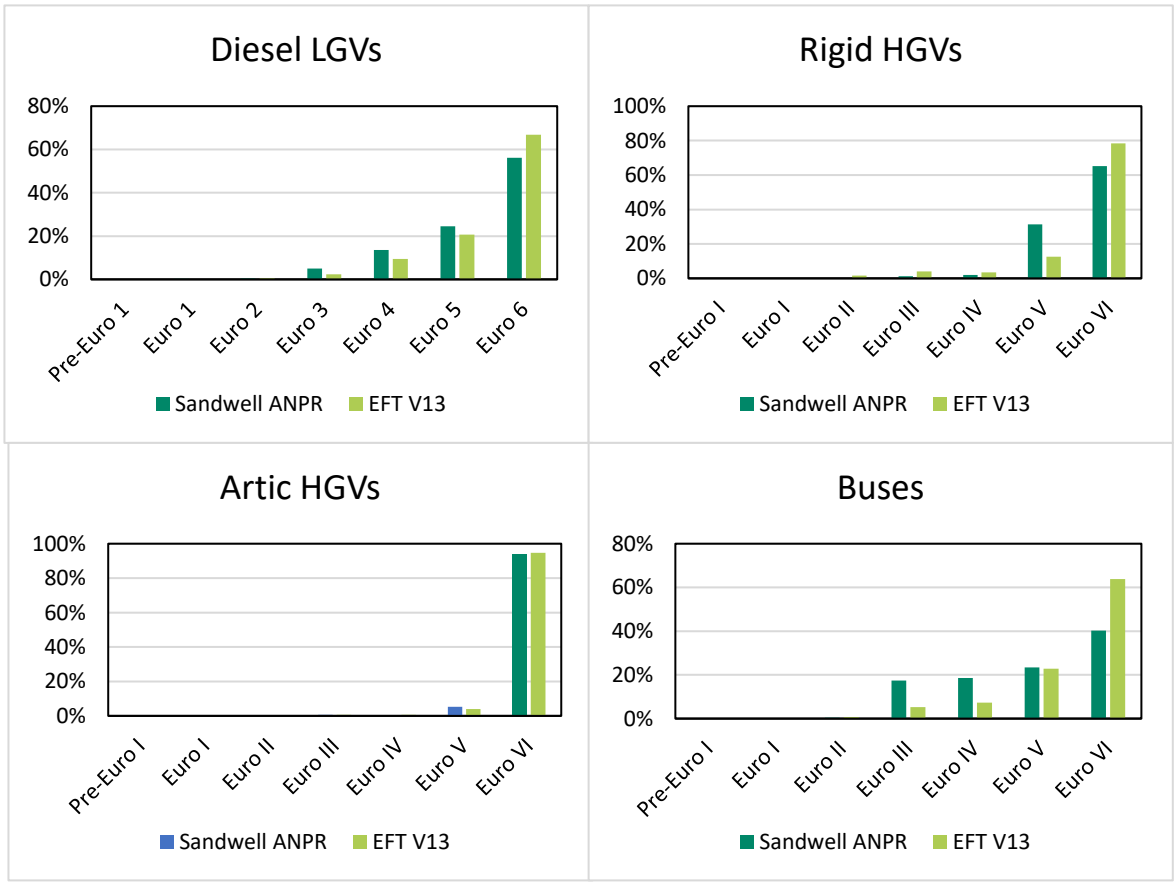


Figure 3-7 – LGV, HGV and Bus Euro Classification, ANPR and EFTv13, 2022



These charts show that the percentage of Euro 6 cars found in Sandwell is lagging behind the national fleet, with only 43.6% of petrol cars being Euro 6 (against a national 56.2%) and only 38.9% of diesel cars (against a national 48.8%). The difference is made up with larger proportions of the more polluting Euro 3, 4, and 5 cars. This is likely to reflect the relatively deprived population within Sandwell, choosing to keep older cars running rather than replacing them with newer models for cost reasons.

Similarly, LGVs and rigid HGVs are noticeably older than the national fleet, with only 56.2% of petrol cars being Euro 6 (against a national 66.8%) and only 65.3% of rigid HGVs (against a national 78.5%). The articulated fleet is more consistent with the national distribution, which may be expected as these tend to operate overall larger distances and on the strategic road network which Sandwell hosts.

3.3.2 Road Traffic Data

There is a network of VivaCity[29] traffic sensors across the West Midlands which provides traffic counts. This network has been interrogated to identify count locations representative of the locations of greatest air quality concern (measuring concentrations of >36 µg/m^3 in 2023) as shown in Table 2-2. Suitable sensor locations have been identified in each case and the vehicle fleet makeup is presented in Table 3-2 below.

Table 3-2 – Fleet Composition at Relevant Monitoring Locations

VivaCity Sensor	Road Link	Representative of Monitor	Car %	LGV %	Bus %	HGV %	Motor-bike %
268	Birmingham Road	BP, and Birmingham Road (Oldbury)	80.0	13.9	1.0	4.7	0.4
199	All Saints Way	C1D	85.7	10.0	2.6	1.4	0.3
266	Dudley Road East	C7D	80.4	13.7	1.8	3.7	0.4
267	Dudley Road	C7D	83.3	12.0	1.3	3.0	0.3

The fleet breakdowns are quite similar across all three locations, with 80.0 – 85.7% cars, 10.0 – 13.9% LGVs, 1.4 – 4.7% HGVs, and 1.0 – 2.6% buses. Source apportionment has been carried out at monitoring site BP (NO_2) and Birmingham Road (Oldbury) (PM_{10} and $PM_{2.5}$) using Sensor 268 data as these are the locations of

[29] https://dashboard.vivacitylabs.com/

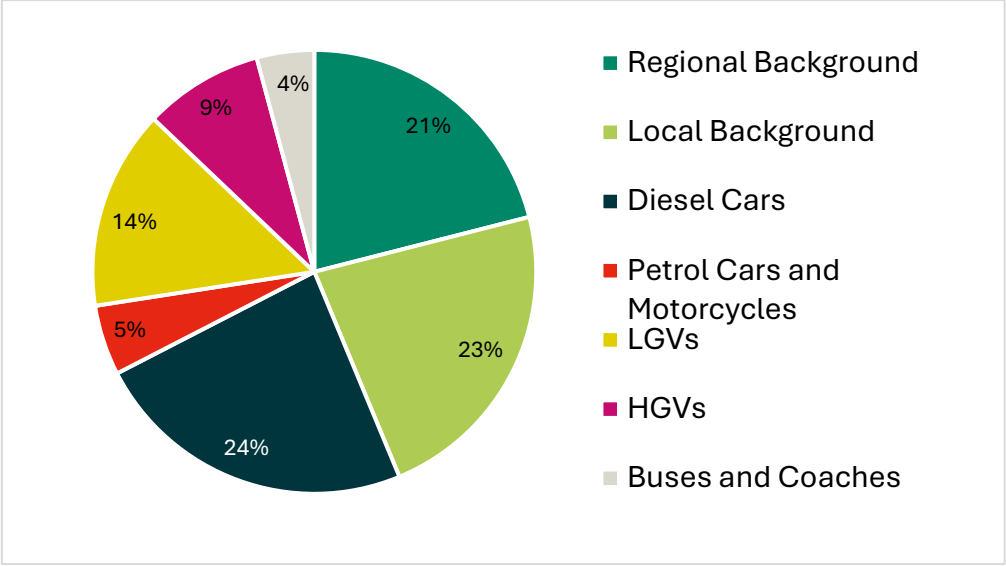
highest concentration. However, a similar source apportionment could be expected at the other locations due to the similarities in fleet profile.

VivaCity point 268 represents the eastbound flow along Birmingham Road. The westbound data was compiled by applying a factor derived from the estimated DfT traffic data for count point 17142. Firstly, a comparison was undertaken between the eastbound DfT traffic count data with the VivaCity data to ensure these were in line with each other. Following this confirmation, factors were calculated for each vehicle type between 2023 eastbound and westbound data, which were applied to the VivaCity data in order to calculate comparable westbound data.

3.3.3 Road Traffic Data Source Apportionment NO_2

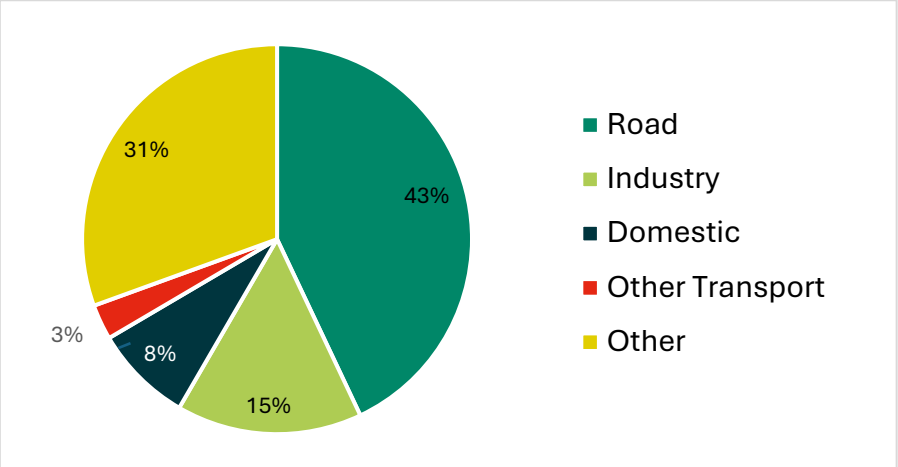
Analysis of emissions along Birmingham Road has been undertaken using the EFT v13.0 and local fleet data for 2023 to determine the main vehicle contributions of NO_X. Figure 3-8 shows that total road traffic accounts for 56% (24.8 µg/m^3) of total average NO_2 with diesel cars and LGVs representing the largest proportions, 24% (10.4 µg/m^3) and 15% (6.4 µg/m^3) of total NO_2 (measured concentration, not adjusted for relevant exposure) respectively. Regional background, pollution transported into an area by the wind from further away, accounts for 21% (9.2 µg/m^3) while local background accounts for 23% (10.0 µg/m^3) of total NO_2.

Figure 3-8 – Total NO_2 Source Apportionment at Monitor BP – Birmingham Road, Oldbury



Based on the Defra background maps, the regional and local background contributions at monitor BP are still predominantly dominated by road emissions (43%), as shown in Figure 3-9.

Figure 3-9 – NO_2 Source Apportionment at Monitor BP (background contribution detail) - Birmingham Road, Oldbury



This indicates that actions targeted towards reducing emissions from road vehicles, particularly from diesel cars, are likely to be most effective to reducing NO_2 concentrations in Sandwell.

For PM_{10} and $PM_{2.5}$, the source apportionment for the proportions of particulate matter along Birmingham Road attributable to road traffic emissions have been considered separately to the background concentrations, due to Defra background maps reporting higher concentrations than the roadside modelling.

Figure 3-10 Road Traffic Contribution Source Apportionment PM_{10} – Birmingham Road, Oldbury

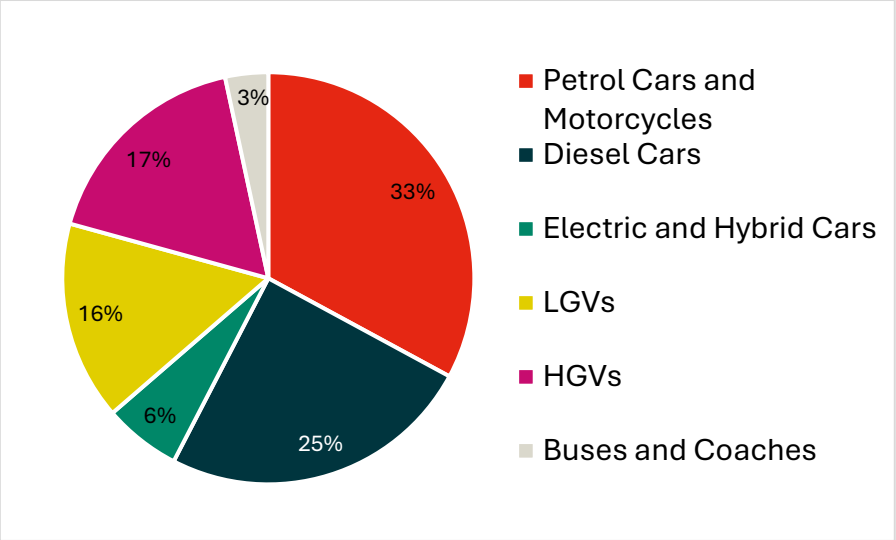


Figure 3-11 Road Traffic Contribution Source Apportionment $PM_{2.5}$ – Birmingham Road, Oldbury

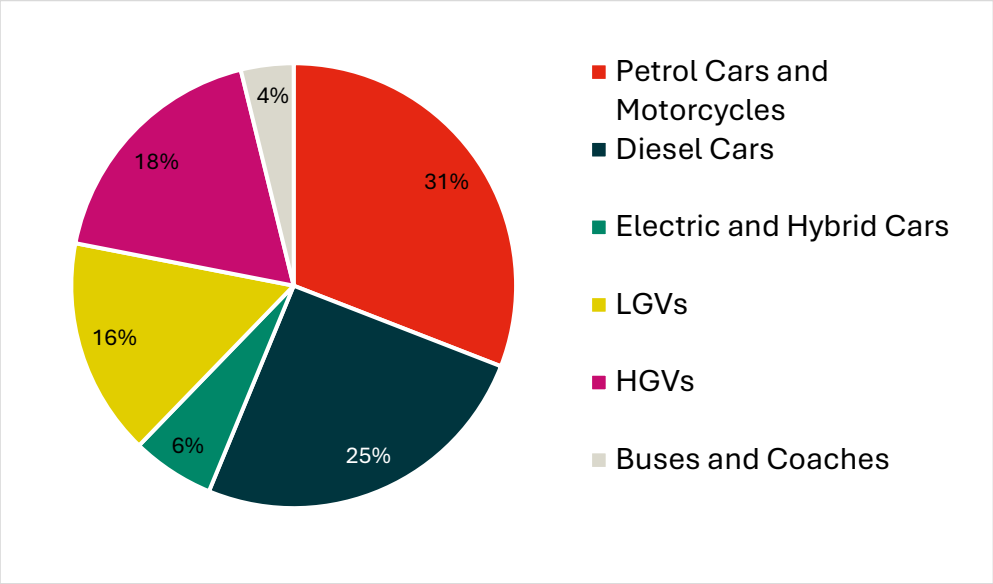


Figure 3-10 shows the PM_{10} road contribution and Figure 3-13 shows the $PM_{2.5}$ road contribution. Unlike NO_2, the largest contributors of particulate matter are HGVs with 33% of road PM_{10} and 31% of road $PM_{2.5}$, followed by diesel cars, petrol cars and motorcycles and LGVs. Similarly to the source apportionment for NO_2, buses and coaches contribute the smallest proportion of particulate matter.

Figure 3-12 – Background Contribution Source Apportionment PM_{10} – Birmingham Road, Oldbury

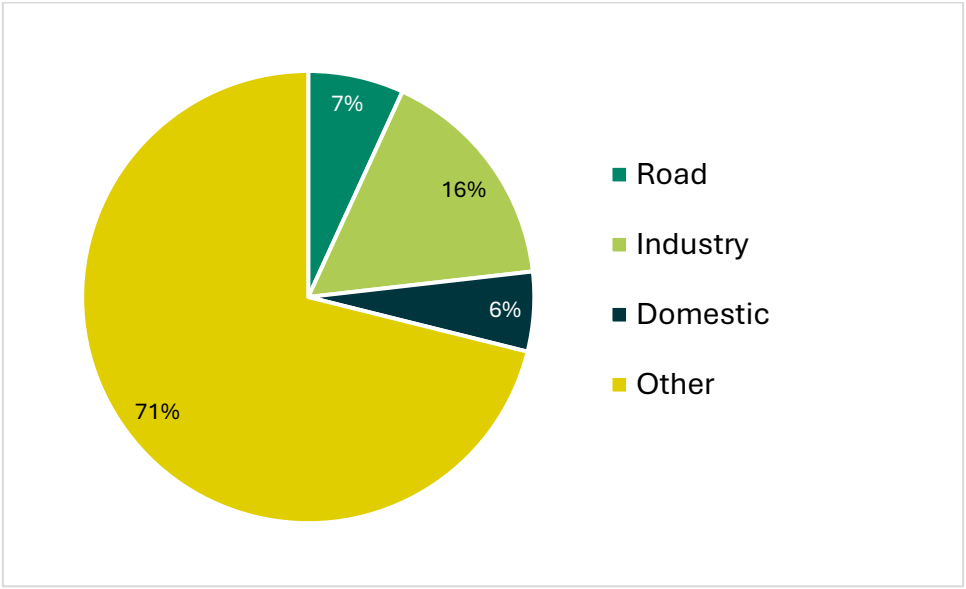


Figure 3-13 – Background Contribution Source Apportionment $PM_{2.5}$ – Birmingham Road, Oldbury

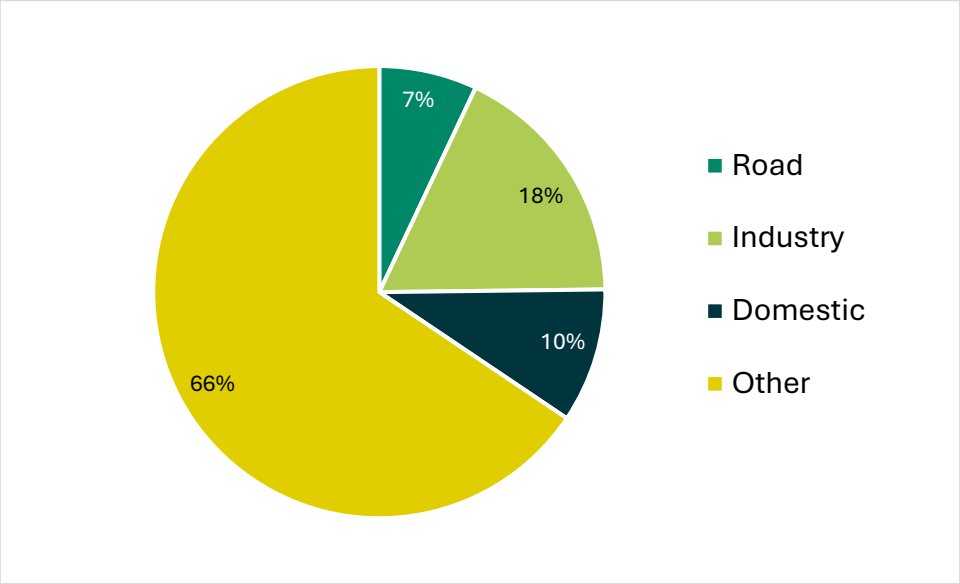


Figure 3-12 shows the breakdown of PM_{10} background contributions along Birmingham Road from Defra background maps and Figure 3-13 shows the same breakdown for $PM_{2.5}$. Unfortunately, 71% of background PM_{10} concentrations and 66% of background $PM_{2.5}$ concentrations are categorised as "Other". Of the three defined sources, road traffic contributes only 7% of background PM_{10} and $PM_{2.5}$ concentrations, this is much lower than the 43% of the NO_2 background concentration. Industry remains approximately constant with NO_2, at 16% of background PM_{10} 18% of background $PM_{2.5}$ compared to 15% of background NO_2. Domestic also remains comparable with NO_2, with 6% of PM_{10}, 10% of $PM_{2.5}$ and 8% of NO_2.

A 2025 study looked at sources of $PM_{2.5}$ at urban background locations in Birmingham[30]. The results are shown in Combined Source Apportionment (c) in

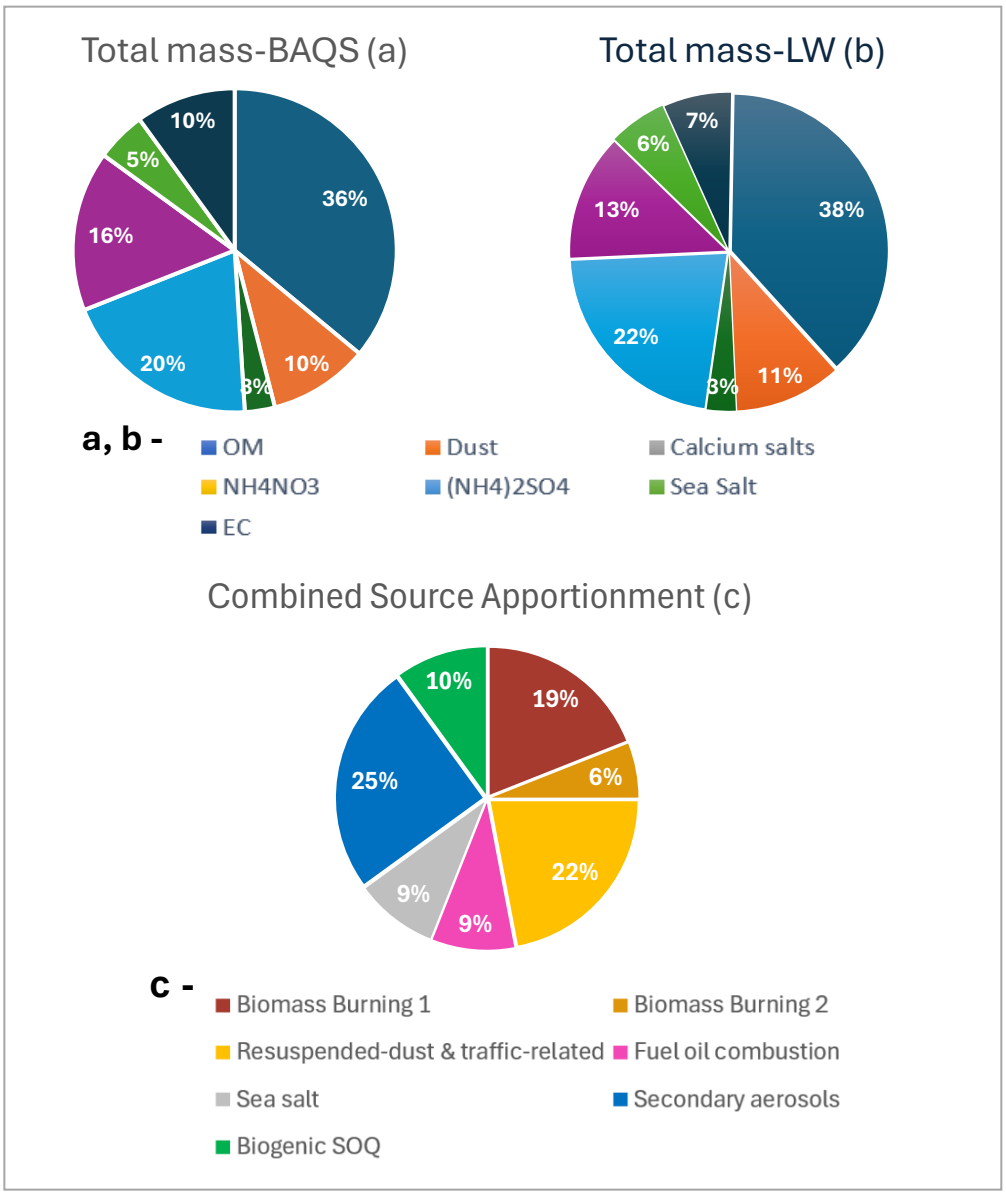
Figure 3-14 and given the proximity of Sandwell to Birmingham, it can be assumed the results of this study are broadly applicable across Sandwell.

These results provide a greater indication of the source apportionment of PM_{10} and $PM_{2.5}$ than Figure 3-12 and Figure 3-13 by avoiding the "Other" category. Approximately 25% are attributable to biomass burning from sources such as log burners, garden waste burning, barbecues and biomass boilers, 25% to secondary aerosols as a function of atmospheric chemistry, 22% to resuspended dust and traffic related PM from exhaust emissions or brake and tyre wear, 10% to biogenic secondary organic aerosols and 9% to both sea salt and fuel oil combustion, including industrial processes. This indicates that biomass burning is a key source to

[30] Srivastava et al (2025). Comparative receptor modelling for the sources of fine particulate matter ($PM_{2.5}$) at urban sites in the UK

target actions to reduce PM, and actions related to transportation taken for NO_2 are likely to have co-benefits for PM also.

Figure 3-14 – The contribution of different $PM_{2.5}$ components to total mass from the mass closure model (a, b); The average percentage contribution of sources to the total $PM_{2.5}$ mass at both sites from PMF (c)[31]



[31] Srivastava et al (2025). Comparative receptor modelling for the sources of fine particulate matter ($PM_{2.5}$) at urban sites in the UK

3.4 Future Baselining

No required reduction in emissions has been calculated as Sandwell AQMA is currently in compliance with the relevant objectives, and therefore the required reduction is zero. Instead, a future baselining exercise has been undertaken to explore how air quality may change over the lifetime of the AQAP.

Multiple methods have been considered to assess the potential changes in future concentrations at the monitoring site BP, as a representative worst case within the Borough (although noting that this site does not exceed at relevant exposure). Potential future emissions along Birmingham Road have been identified across the duration of the Air Quality Action Plan.

In addition to this, the Air Quality Lifecourse Assessment Tool (AQ-LAT)[32], has also been employed to calculate the potential health and economic costs associated with future emissions using the predicted percentage reduction in NO2 emissions at the Birmingham Road site.

3.4.1 Extrapolating the current rate of change

The change in monitored concentration at BP from 2022 to 2023 was calculated for both the monitoring site and is shown in .

Table 3-3. This change was applied for subsequent years until 2030 to predict future concentrations if the current rate of change continued. Air quality monitoring is highly variable year-on-year, so this method is likely to be overly simplistic.

Table 3-3 – NO_2 Concentrations (µg/m^3) at BP based on 2022 and 2023 concentrations

Year	2022	2023	2024	2025	2026	2027	2028	2029	2030
At monitoring site	44.5 µg/m^3	44.0 µg/m^3	*43.5 µg/m^3*	*43.0 µg/m^3*	*42.5 µg/m^3*	*42.0 µg/m^3*	*41.5 µg/m^3*	*41.0 µg/m^3*	*40.5 µg/m^3*
	Measured		*Projected*						

3.4.2 Applying Defra Roadside NO_2 Projection Factors

Table 3-4 shows annual mean NO_2 concentrations at monitoring site BP based on Roadside NO_2 Projection Factors[33] shown in Table 3-5 which were applied to the 2023 concentration at the monitoring site. The “Rest of UK (HDV =< 10%)” factors

[32] https://wm-air.org.uk/project/health/

[33] https://laqm.defra.gov.uk/air-quality/air-quality-assessment/roadside-no2-projection-factors/ accessed 22/04/2025

were used as the traffic data showed buses and HGVs comprised 5.7% of the fleet along Birmingham Road. Using Defra's roadside projection factors for NO_2, a faster rate of improvement was expected than extrapolating the current rate of change.

Table 3-4 – NO_2 Concentrations (µg/m^3) at BP based on Roadside NO_2 Projection Factors

Year	2023	2024	2025	2026	2027	2028	2029	2030
At monitoring site	44.0 µg/m^3	*41.5 µg/m^3*	*39.0 µg/m^3*	*36.8 µg/m^3*	*34.5 µg/m^3*	*32.1 µg/m^3*	*29.8 µg/m^3*	*27.1 µg/m^3*
	Measured	*Projected*						

Table 3-5 – Defra Roadside NO_2 Projection Factors

Year	Factor
2024	0.942184154
2025	0.886509636
2026	0.837259101
2027	0.784796574
2028	0.730192719
2029	0.676659529
2030	0.615631692

3.4.3 Evaluating the health and economic costs of air pollution in Sandwell

The Air Quality – Life Assessment Tool (AQ-LAT) is a robust modelling framework designed to quantify the health and economic impacts of air pollution across the West Midlands. It integrates regional air quality data with demographic and health statistics from the seven local authorities, offering a comprehensive view of pollution-related outcomes.

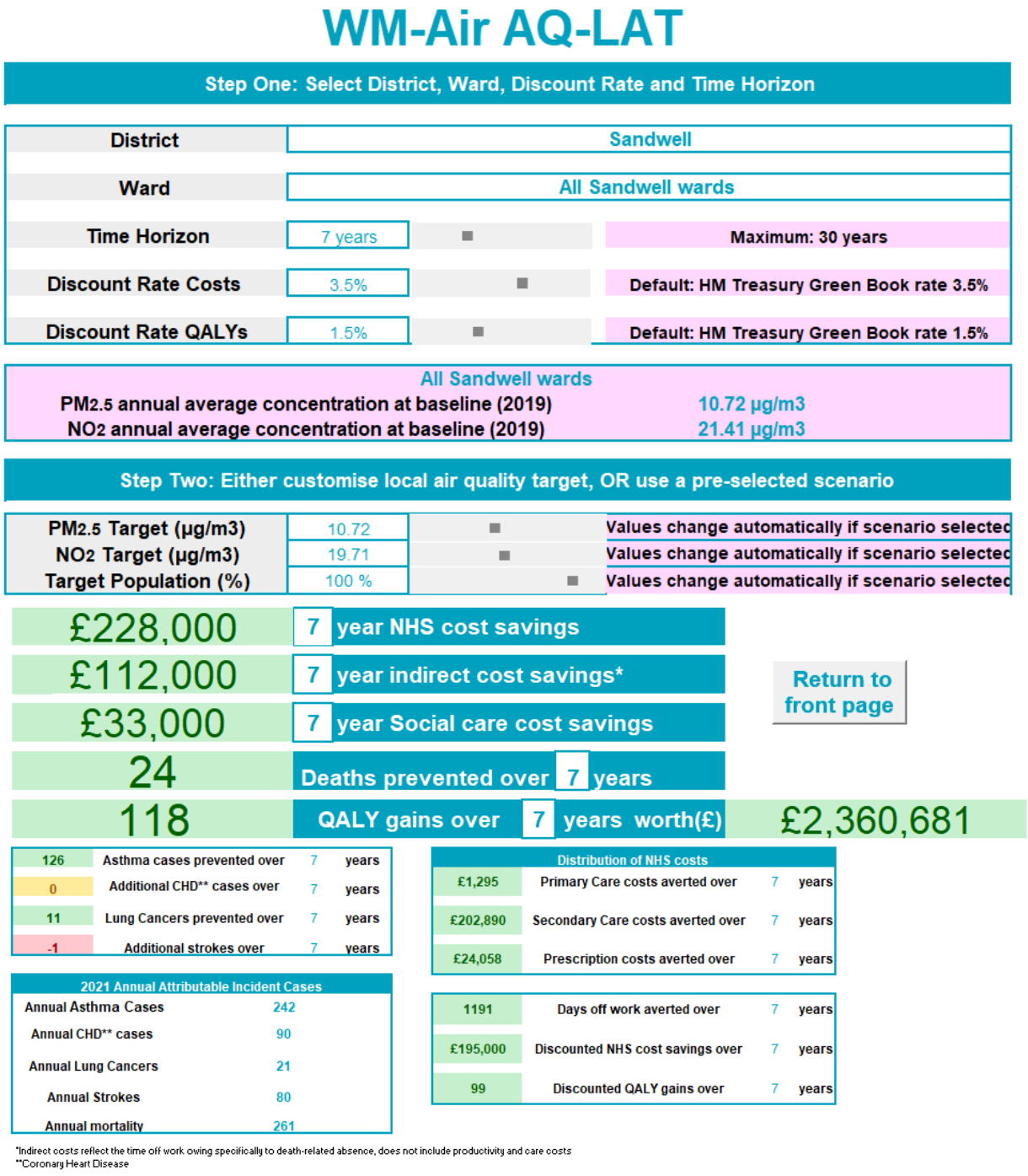
The model evaluates a range of indicators:

Health impacts: including mortality, childhood and adult asthma, stroke, coronary heart disease, and lung cancer.

Economic impacts: covering NHS treatment costs, indirect costs such as lost productivity, social care expenses, and Quality Adjusted Life Years (QALYs).

Using Defra's roadside projection factors for NO_2 (Table 3.4), a 7.95% reduction in annual mean NO_2 concentrations is projected between 2023 and 2030 at the BP site in Sandwell. This corresponds to a decrease from 21.41 µg/m³ to approximately 19.7 µg/m³.

Figure 3-15 - Scenario to demonstrate potential economic and health Impact of a 7.95% reduction in NO2 emissions in Sandwell between 2023 and 2030

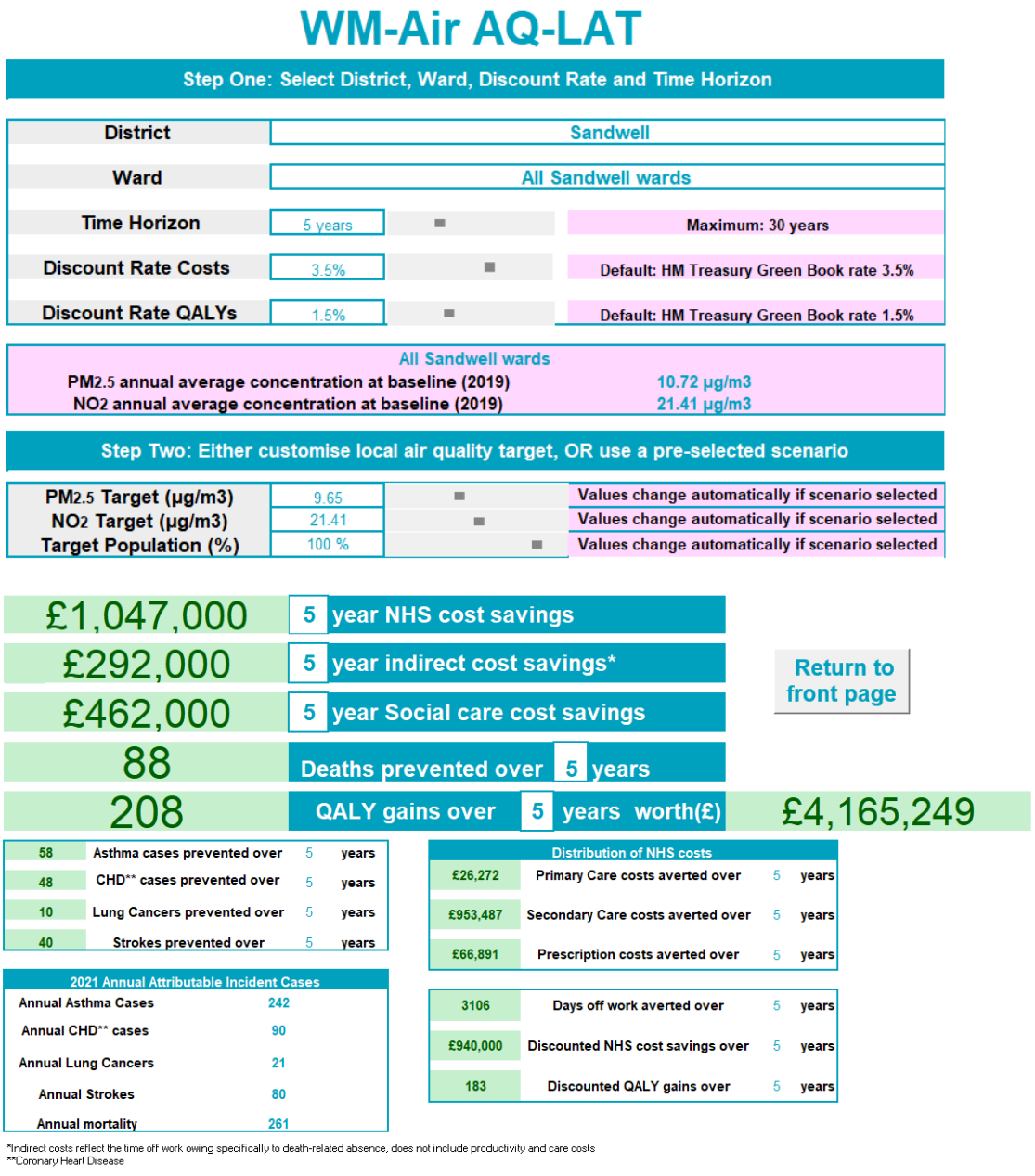


When this target concentration is input into AQ-LAT (and with no change in $PM_{2.5}$ baseline concentrations) the model estimates Quality Adjusted Life Year (QALY) benefits exceeding £2.36 million over seven years as shown in Figure 3-15.. These benefits are primarily driven by reduced mortality as well as improved quality of life, demonstrating that even modest reductions in NO_2 can yield significant public health gains as well as economic savings.

This scenario underscores the importance of sustained emission reduction strategies and supports the case for continued investment in air quality improvement measures.

The AQ-LAT will be an invaluable resource for future Air Quality Annual Status Reports, enabling us to calculate the impact of changes in air pollution concentrations against the tool's 2021 baseline. We also have the option to calculate changes in both NO_2 and $PM_{2.5}$, with reductions in the latter offering even greater health and economic benefits. For example, achieving a 10% reduction in $PM_{2.5}$ by 2030, as shown in Figure 3-16, could deliver estimated savings of over £4 million in QALY gains within five years, highlighting the significant public health and economic value of targeted air quality improvements.

Figure 3-16 – Scenario to demonstrate potential economic and health Impact of a 10% reduction in PM2.5 emissions in Sandwell between 2025 and 2030



3.4.4 Using TEMPro and the Emissions Factor Toolkit

TEMPro (Trip End Model Presentation Program) is software supplied by the Department for Transport which is used to view the NTEM (National Trip End Model) dataset which provides forecasts of growth in vehicle journeys.[34] NTEM data can be downloaded for a range of geographical scales from the whole country down to individual LSOAs, for 2011 to 2051 and multiple vehicle types. For this assessment, v8.0 core scenario data for Sandwell from 2023 to 2030 for car journeys on A Roads were used to calculate Adjusted Local Growth Factors for each future year based on a base year of 2023. The Local Growth Factors are shown in Table 3-6 alongside the two-direction traffic flow following the application of the relevant factor. A limitation of this methodology is that the TEMPro Growth Factors are only based on car journeys however these factors have been applied to the total traffic flow. It's noted that these factors do not consider the effects of any specific future schemes. A list of CRSTS funded schemes in Sandwell that may affect air quality are provided in Appendix C.

Table 3-6 – Local Traffic Growth Factors from TEMPro

Year	Local Growth Factor	Two direction traffic flow on Birmingham Road
2023	-	26227
2024	1.00542501	26369
2025	1.01084071	26511
2026	1.02152991	26791
2027	1.03192434	27064
2028	1.04227268	27335
2029	1.05267433	27608
2030	1.06307957	27881

The Emissions Factors Toolkit v13.0 (EFT) was run for each year between 2024 and 2030 for two scenarios. Firstly, a "default fleet turnover" using the updated traffic data with bespoke euro fleet and fleet data from the ANPR study projected to the relevant year, representing national expectations of fleet turnover (the removal of older vehicles and replacement with newer vehicles, including electric vehicles). Secondly, a "no fleet turnover" scenario was run using the updated traffic data from Table 3-6 with a 2023 baseline. These two sets of results are presented in Table 3-7 and

[34] https://www.gov.uk/government/publications/tempro-downloads accessed 15/4/25

shown in **Error! Reference source not found.** along with a “slow fleet turnover” scenario which represents a mid-point between the two other scenarios.

Table 3-7 – NO_X Emissions for three Scenarios

Year	NO_X emissions from EFT		
	Default fleet turnover	Slow fleet turnover	No fleet turnover
2023	0.08191		
2024	0.07420	0.07826	0.08235
2025	0.06693	0.07486	0.08279
2026	0.06032	0.07199	0.08367
2027	0.05427	0.069340	0.08452
2028	0.04843	0.06690	0.08537
2029	0.04306	0.06464	0.08622
2030	0.03795	0.06251	0.08707

Figure 3-17– Percentage of emissions with different rates of fleet turnover

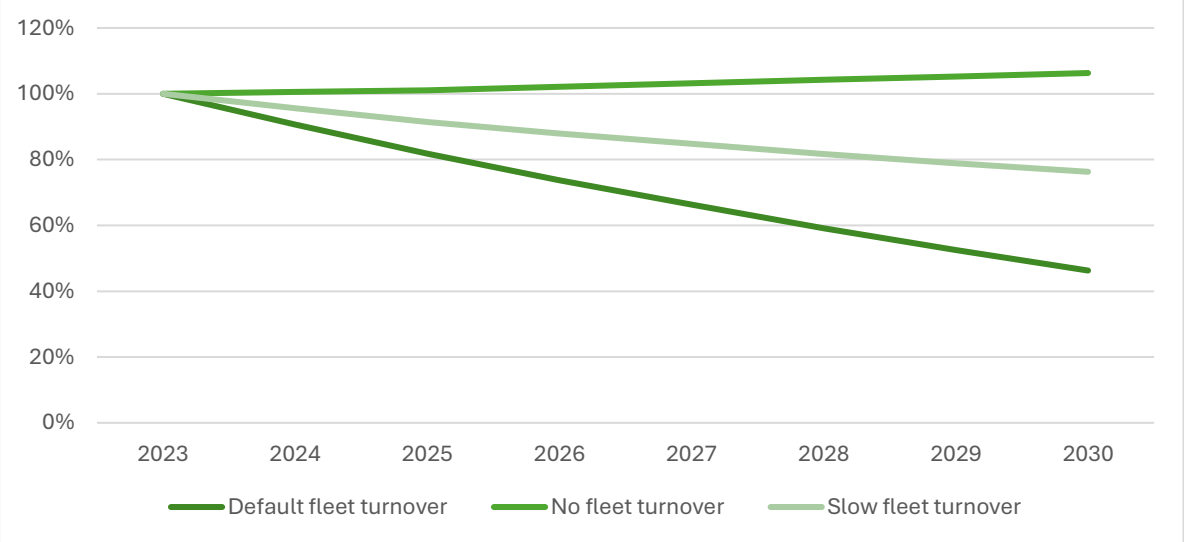


Table 3-7 and **Error! Reference source not found.** show that with no fleet turnover, the emissions are predicted to increase by approximately 5% from 2023 to 2030 due to increased traffic flows, as shown in Table 3-6. The other two scenarios show reductions in emissions from 2023, for the default fleet turnover, the emissions could reduce by over 50% by 2030. The slow fleet turnover scenario shows reductions in emissions of just over 20% between 2023 and 2030, this scenario may be more

representative of expected fleet turnover in Sandwell as the ANPR data in Section 3.3.1 indicates that the fleet is currently lagging behind the national fleet, so it is a reasonable assumption that the same factors causing this will also cause a slower fleet turnover than expected national.

3.5 Key Priorities

Priority areas for the lifetime of this AQAP are shown below. Table 5-2 provides details of all measures proposed to achieve these priorities.

- **Priority 1** – To achieve five continuous years of compliance with the NO_2 annual mean objective within the AQMA to enable revocation.
- **Priority 2** – To protect the health of young people within the Borough by measures targeted to schools in line with Sandwell's goal to be a UNICEF Child Friendly Community.
- **Priority 3** – To drive forward behaviour change with respect to travel choices, particularly focused on the adoption of active travel in the context of the low baseline.
- **Priority 4** – To collaborate with the West Midlands Combined Authority and others to achieve regional air quality goals.
- **Priority 5** – Pro-actively raise awareness of and enforce the smoke control area among residents and relevant businesses to reduce PM emissions from biomass burning.
- **Priority 6** – Pro-actively work with permitted installations on best practice.
- **Priority 7** – Ensure that air quality considerations are taken into account with new developments through the planning process.

4 Development and Implementation of Sandwell Council AQAP

4.1 Consultation and Stakeholder Engagement

In developing/updating this AQAP, we have worked with other local authorities, agencies, businesses and the local community to identify appropriate measures to improve local air quality. Schedule 11 of the Environment Act 1995, as amended by the Environment Act (2021), also requires that as a local authority we consult with the bodies listed in Table 4.1.

To fulfil this requirement, we completed two public consultations. The main consultation was held from Monday 11 August to Sunday 21 September 2025, this provided stakeholders and residents with an opportunity to review and comment on the proposed measures. The second was a targeted 'schools' consultation' that was conducted from Monday 8 September to Monday 29 September 2025, specifically designed to gather feedback on actions addressing air pollution in and around school environments.

Stakeholder engagement was achieved primarily through an online questionnaire, which was widely promoted to residents and businesses to gather their views on the proposed measures. A range of communication methods were used to maximise reach and participation, including:

- Posts on Sandwell Council's website and social media platforms
- Posters distributed to all libraries across the borough
- Laminated posters displayed in prominent public locations, including parks, train stations, bus stations, car parks, and town centres
- Laminated posters sent to all schools, complete with ties for easy attachment to school gates and railings
- Direct email outreach to local businesses
- Inclusion in the Sandwell Council staff briefing
- Inclusion in the weekly newsletter circulated to all schools

The statutory consultation was also issued directly via email to key stakeholders, including the Environment Agency, the West Midlands Combined Authority, all local authorities within the West Midlands, and other relevant public bodies. These included NHS organisations, charitable groups, and organisations representing local business and community interests. A summary of the response to our consultation stakeholder engagement is given in **Appendix A: Response to Consultation** along with a link to the detailed Consultation Survey Report.

Table 4-1 – Consultation Undertaken

Consultee	Consultation Undertaken
The Secretary of State	Yes, draft report submitted to Defra in August 2025 and agreed by Defra in September 2025
The Environment Agency	Yes
National Highways	Yes, invited to and attend the AQAP Steering Group meetings
All neighbouring local authorities	Yes, Walsall, Wolverhampton, Dudley and Birmingham were consulted as well as Solihull and Coventry who fall within the West Midlands Region
Other public authorities as appropriate, such as Public Health officials	Public Health Consultants and Director of Public Health, NHS, University of Birmingham, West Midlands Combined Authority and Black Country Transport attended the AQAP steering group meetings and were consulted
Bodies representing local business interests and other organisations as appropriate	Yes, through attendance at the AQAP steering group, online consultation and direct emails

4.2 Steering Group

A Steering Group was established in February 2025 for the development of the AQAP, and the first meeting took place on 27th February 2025. The aim of the group was to understand local issues relating to air pollution that affected Sandwell as well as the current focuses of Sandwell Council.

The steering group is comprised mainly of Sandwell Council officers from Environmental Health, Planning, Public Health, Energy, Pollution Control, as well as external members from West Midlands Combined Authority, Transport for West Midlands, Black Country Transport, National Highways, Living Streets, British Cycling, the NHS and AECOM as external consultants.

A further steering group meeting took place on 8th April 2025 where a full understanding of the baseline was presented, and a long list of potential actions was

discussed. The final steering group meeting in the development of this AQAP was held on 2nd June where the short list of measures was discussed.

The minutes of the steering group meetings are presented in Appendix E.

It was agreed to hold steering group meetings every six months over the course of the implementation of the AQAP to report on progress and to continue to drive for the delivery of actions to improve air quality.

5 AQAP Measures

Table 5-3, later in this section, summarises the Sandwell Council 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 regular annual updates on implementation of these measures.

Further information on the cost-benefit analysis of these measures and greater detail of the measures is provided in Section 5.1 and 5.2 respectively.

5.1 Long List and Cost Benefit Analysis

A long list of potential measures was drawn up based upon the key priorities, previous work undertaken by the Council, the priorities of Steering Group members, and a consideration of the relevant aspects of the West Midlands Combined Authority Air Quality Framework.

A cost benefit analysis was carried out for a long list of actions as part of the process for defining a short-list. Four aspects were considered in this analysis:

- The feasibility of carrying out the action, i.e. is there likely to be public or internal support, is there an available funding source.
- The air quality impact of the action, i.e. how large of an impact could this measure have on concentrations of pollutants on a local and/or regional level and impact on health. This is based on professional judgement and a review of available literature where possible.
- Any co-benefits arising from this action, i.e. are there also benefits for public health, active travel, climate, the economy, or society more widely; and
- High level assessment of the cost of this action.

Each aspect was rated from 1 to 3, where 1 is low and 3 is high and then the following equation was applied to calculate a total score for each measure:

Score = (feasibility + (2 * air quality impact) + co-benefits) * cost

The air quality impact of the action was double rated compared to feasibility and co-benefits as this is the primary focus of the AQAP.

For the scoring of the cost, the following categories were used: less than £10,000, between £10,000 and £100,000, and greater than £100,000.

Alongside the score for each measure, professional judgement was applied in order to finalise a short list as the scores do not always capture the whole picture. For example, measures involving promotion of active travel or public engagement scored poorly for the air quality impact, however public engagement and support is vital for the success of other measures.

The long list measures, their scores, and their shortlisting outcome are presented in Table 5-1. Detailed information on the shortlisted measures is provided in Section 5.2 and further information on the measures not taken forward and the reasoning for that are provided in Appendix B.

Table 5-1 – Shortlisting Exercise

Number	Measure	Feasibility	AQ impact	Co benefit	Score	Cost	Cost Score	Shortlisted
1	School Streets	3	3	3	12	2	24	Y
2	Speed restrictions	2	3	3	11	1	11	Y
3	Active travel planning	3	2	3	10	2	20	Y
4	Update planning guidance for air quality	2	3	2	10	2	20	Y
5	Active travel promotion	3	2	3	10	2	20	Y
-	Cycling and Walking Infrastructure Plan	3	2	3	10	2	20	N
-	Low Traffic Neighbourhoods	1	3	3	10	1	10	N
6	Auntie Duck	3	2	2	9	2	18	Y

Number	Measure	Feasibility	AQ impact	Co benefit	Score	Cost	Cost Score	Shortlisted
7	Accredited education scheme for schools	3	2	2	9	2	18	Y
8	Smoke control	3	2	2	9	2	18	Y
9	Planning application support and review	3	2	2	9	2	18	Y
10	Targeted public engagement	3	2	2	9	2	18	Y
11	Investment in new cycle infrastructure	2	2	3	9	1	9	Y
12	Solid fuel burning	2	2	2	8	2	16	Y
13	Partnership with WMCA	3	2	1	8	2	16	Y
14	Local Transport Plan	2	2	2	8	2	16	Y
15	Work with trusted community advisors to deliver AQ messaging	3	2	1	8	2	16	Y
16	CIL / S106	2	2	2	8	2	16	Y
17	Industrial permitting	3	2	1	8	2	16	Y
18	A1 permitting	3	2	1	8	2	16	Y
19	Council zero-emission fleet	2	2	2	8	2	16	Y
-	Clean Air Zone	1	3	1	8	1	8	N
20	Health partnership	3	1	2	7	2	14	Y

Number	Measure	Feasibility	AQ impact	Co benefit	Score	Cost	Cost Score	Shortlisted
-	Bus Lane Enforcement	3	1	2	7	2	14	N
-	Taxi / licensed vehicle policy	1	2	2	7	2	14	N
-	Home energy efficiency	2	1	3	7	1	7	N
21	Maintenance of Air Quality council website	3	1	1	6	3	18	Y
-	Green infrastructure	1	1	2	5	2	10	N

5.2 Short-list of measures

Detailed commentary of all short-listed measures are included in Table 5-2 below. Three measures have been identified as the 'top three' air quality actions due to their highest potential for impact as identified by the shortlisting procedure, and these actions are prioritised for further detailed information in Sections 5.3 and 6. All actions are presented in order of descending score (before cost considerations) from shortlisting. Additionally, the actions are assigned themes which correspond to the key priorities identified above, in Section 3.5.

Table 5-2 – Detailed Descriptions of all Short-Listed Air Quality Action Plan Measures

Measure No.	Measure Name	Theme	Description
1	School Streets	Children	A School Street is a road outside a school that has temporary restrictions during drop-off and pick-up times to reduce school-related and through traffic. Access is still permitted for residents, emergency services, and other essential users. A School Streets trial was enacted at Ferndale Primary School during 2024 and existing funding allocation for implementation and enforcement of further School Streets. Additionally, the Council have recently acquired powers to enforce some moving traffic contraventions so school streets can be enforced by a portable camera, removing reliance on school staff or volunteers to use physical barriers. This temporary restriction specifically benefits children at the school by reducing overall traffic and idling near school gates and disrupts overall journeys to incentivise non-car use for school journeys, while also making roads safer in these specific locations. Early engagement with Highways will be necessary to ensure School Streets are implemented in suitable locations (not all schools may be viable candidates) and in the most beneficial way, for example, by identifying opportunities to engage with parents, staff, and other stakeholders to increase access and uptake of walking and cycling.
2	Speed restrictions	Fleet Technology and Behaviour	Reducing speed limits in key locations and zones. An air quality assessment for All Saints Way, West Bromwich, indicates possible benefits to local air quality through decreased acceleration caused by stop-start traffic, Reducing speed limits can help cut exhaust emissions by reducing stop-start traffic and also lowering particulate matter emissions from tyre and brake wear. Whilst this measure cannot be used on all road, speed reductions from 30mph to 20mph are most likely to be suitable for use in town centres, residential areas and roads by schools. Roads where there are more constant traffic speeds are less likely to be considered for any speed reduction measures. Beyond environmental benefits, lower speeds also improve road safety, support active travel, and reduce carbon emissions. Speed reductions are already planned for some roads in Sandwell, including the A457 Birmingham Road (from 40 mph to 30 mph), which is a key location in terms of air quality. In this location acceleration out of a junction is likely to contribute to high concentrations meaning that introducing a speed limit here should benefit air quality. Other speed reductions are planned on the A456 Hagley Road West, A4041 Queslett Road, Londonderry Road and Londonderry Lane. A road safety budget has been allocated for the introduction of further 20 mph zones in the medium term, although specific zones have not yet been identified. The outcomes include co-benefits in terms of road safety (reduced road casualties), encouraging active travel and reducing carbon emissions.
3	Active travel planning	Active Travel	Active Travel is a term used to describe everyday ‘journeys for a purpose’ made by walking, wheeling, or cycling. To support greater uptake of Active Travel schools and businesses need tailored guidance, this is best delivered by a dedicated Active Travel Officer who can help these organisations develop sustainable commuting strategies as alternatives to car use. In Sandwell, progress will be tracked through the Modeshift STARS platform, with a goal that 75% of schools will have an accredited Active Travel Plan by 2030. Prioritising school and workplace travel plans is key to reducing pollution and promoting healthier, more active lifestyles. This approach aligns with the National Planning Policy Framework, Local Cycling and Walking Infrastructure Plans, and Sandwell Council’s wider transport and environmental strategies. It also supports the Council’s commitment to protecting children’s health and enhancing the impact of initiatives like School Streets.
4	Produce updated guidance for air quality to support the new Local Plan	Planning	A new Local Plan for Sandwell has been drafted and is anticipated to be adopted in late 2025/early 2026. The emerging local plan contains an air quality policy (SHW3) that support a diverse approach to addressing the issue of poor air quality which refers to supporting documentation (including primarily the 2016 Black Country Air Quality Supplementary Planning Document (SPD)) in terms of technical aspects, such as the nature of air quality assessment required. This document is now 9 years old and does not reflect more recent national policy and guidance or local ambition. The expected revocation of the AQMA in 2027 risks air quality losing some of its visibility within the planning process. Therefore, it is considered that an update to this document to better support the new local plan and the current position is required. However, it is understood that SPDs are likely to be abolished pursuant to the Levelling Up & Regeneration Act 2023 and it is not yet clear what alternative documentation could take its place in this instance. The situation is set out in the local plan as follows:

Measure No.	Measure Name	Theme	Description
			"The approach to air quality set out in the joint document will need to be revisited, considering new national legislation, regulations and targets, and regional and sub-regional developments regarding air quality, and in light of the abolition of supplementary planning guidance and documents." Therefore, this action is proposed to identify how best to support the aims of the local plan with respect to air quality, and the details of implementation are not yet known but will be reporting on in subsequent ASRs. In addition, the WMCA is at an early stage of considering developing air quality guidance for planning and this is expected to be a positive avenue to influence planning policy into the future.
5	Active travel promotion	Active Travel	Promotion of walking and cycling via awareness campaigns with schools, businesses and communities, showcasing new and existing cycle paths and walkways, production of local maps and advice on how residents can use green space for active travel and canal paths to reduce pollution exposure. This is likely to only be a small direct benefit but is an essential enabling measure to complement other measures. This measure is likely to include an annual awareness campaign and will also benefit from the continued employment of an Active Travel Officer as detailed in Measure 3. In accordance with Defra's AQIS we will ensure that we implement a clear communications strategy so individuals understand the action that they can take to protect their own health and reduce their contributions
6	Auntie Duck	Children	Implementation and regional expansion of the Auntie Duck educational engagement programme. Auntie Duck already has a lot of support (including from the WMCA) and Sandwell is a leader in this area of education. This is unlikely to achieve a significant direct air quality impact; however, it is a significant public engagement tool with a good response from the existing investment and increases general awareness of air pollution as a significant public health issue. The ambition is that the programme will be rolled out to all primary schools within Sandwell is achieved by 2030. This also aligns with the findings of Defra's Air Quality Information System Review (AQIS) that found that young people play an important role in raising the profile of air quality as a social issue and the importance of embedding air quality lessons in primary schools.
7	Accredited education scheme for schools	Children	Contribute to the West Midlands Combined Authority PH4 measure of introducing an accredited education scheme for all schools. Sandwell is well placed to lead on delivery of this as it complements the existing Auntie Duck programme. Although direct impacts to emissions and air quality is uncertain from this type of measure, education of young people about the sources and consequences of air pollution is extremely important for both current and future behaviour choices that impact on local air quality. This also aligns with the findings of Defra's Air Quality Information System Review (AQIS) that found that young people play an important role in raising the profile of air quality as a social issue and the importance of embedding air quality lessons in primary and secondary schools.
8	Smoke control	PM	Pro-active implementation of the Smoke Control Order via engagement with relevant businesses and residents. This is implementation of an existing Council service although additional Defra grant funding has been used to support an officer post till September 2026. This is likely to primarily affect particulate matter pollution, much less so for NO_2. Activity related to both education and enforcement actions will be reported on annually (e.g. number of advice visits, warning letters issued, financial penalties issued, penalty payments received,).
9	Planning application support and review	Planning	Air quality specialists to provide pre-application advice and to review planning applications once submitted to ensure that the relevant national and local plan policies are adhered to. Sandwell have a team in place to continue to facilitate this. Implementation will continue both before and after the adoption of the new local plan and any supporting guidance produced as part of Measure 4.
10	Targeted public health engagement	Engagement	Working with existing public health channels and healthcare professionals to deliver consistent, targeted messaging to vulnerable residents. This complements wider health and education messaging, and particularly engagement with the NHS.
11	Investment in new cycle infrastructure	Active Travel	Working towards construction of new high quality cycle tracks and other cycle infrastructure in accordance with West Midlands cycle network planning, including links between key developments and key services to promote mode shift from the car. This will contribute to modal shift and may also increase the distance between receptors and emissions to reduce exposure. For example, an optioneering study is underway for implementing a cycle lane and associated road layout changes between Oldbury to Galton Bridge Station (Cycle Route 6 from the plan).

Measure No.	Measure Name	Theme	Description
12	Solid fuel burning	PM	To raise awareness among businesses, residents and landlords of specific air quality issues and potential solutions associated with the use of log burners and indoor and outdoor burning. This will sit alongside the smoke control area work but with a wider remit, e.g. including outdoor burning (bonfires). This is likely to primarily affect particulate matter pollution, much less so for NO_2. Sandwell will also advocate for stronger national measures to increase public awareness of the harms around domestic wood burning. There is potential for a motion to ban bonfires to be put before cabinet which would further influence the development of this measure if adopted.
13	Partnership with WMCA on implementation of the West Midlands Air Quality Framework	Regional	Open route for communication and co-ordination between communication teams at the West Midlands Combined Authority and local authorities to effectively co-ordinate and deliver air quality communications including via their centralised regional air quality website. Sandwell is a part of the wider Black Country and WMCA region, which is recognised by the WMCA Air Quality Planning Guidance Task and Finish Group. This primarily enables wider co-operation and benefits rather than being a stand-alone action. It is important to recognise that transboundary pollutants and cross-border travel contribute to air quality across the whole region and cannot be managed independently at a strategic level therefore co-operation and co-ordination of actions, measures and adoption/development of policy and guidance will achieve much greater benefit. This includes the potential for adopting 'stretch targets' in future iterations of our AQAP or Air Quality Strategy.
14	West Midlands Local Transport Plan	Regional	Oversight and stakeholder engagement by Pollution Control Team can be used to ensure co-benefits to air quality are realised. Opportunity to understand how traffic growth and mode shift are being implemented at a strategic level to ensure consistency with the AQAP.
15	Work with trusted community leaders to deliver AQ messaging	Engagement	Building on successful work carried out with faith groups in Sandwell. It's the role of early engagement to build reassurance and trust within the wider community and encourage individual awareness and responsibility to support community ownership of any proposed measures which may be perceived as restrictions, e.g. School Streets, whilst also ensuring that valid concerns and risks are properly recognised and adopted at early design stages.
16	Community Infrastructure / S106 Agreements	Planning	Use of damage cost contributions via the Community Infrastructure Levy or Section 106 funding to effectively improve the environment, air quality and green infrastructure around new schemes. A system exists to reclaim damage costs, but it may be difficult to spend the funds so it's important to develop a clear strategy.
17	Industrial permitting	Industry	Pro-actively engaging with permit holders to ensure compliance with terms of their permits for part A2/B permits to minimise harmful emissions. Sandwell Council have recently increased staff resources to better facilitate this, and to ensure that all relevant commercial operations with the borough are being bought into the environmental permitting regime.
18	A1 permitting	Industry	Increase co-working with the Environment Agency to enforce A1 permits. Sandwell Council have recently increased staff resources to better facilitate this.
19	Council zero-emission fleet	Fleet Technology and Behaviour	Continuing upgrade of the Sandwell Council vehicle fleet to zero or low-emission vehicles. Costs are unlikely to be significantly greater than organic fleet turnover, in line with central government mandate for the end of sales of internal combustion engine (ICE) vehicles. The air quality impact will be small as council vehicles make up only a small part of the fleet, but this is an important demonstration of leading by example.
20	Health partnership	Engagement	Partnership working with NHS health professionals including school nurses and asthma specialists. This partnership is already established although the exact nature of the partnership may evolve and therefore the scope is yet to be defined. This also aligns with the findings of Defra's Air Quality Information System Review (AQIS) that found that Benefits are likely to be primarily to public health rather than air quality unless there is a behaviour change element.

Measure No.	Measure Name	Theme	Description
21	Maintenance of the existing Air Quality council website to provide information on air quality matters	Engagement	The website already exists and is increasingly used as a primary source of information for residents to engage with the local authority and is already used as a repository for mandated air quality reporting. It is important to consider how this existing resource can be leveraged to host additional information and support measures adopted in the AQAP. The website has a negligible direct impact on air quality as it only provides information.

Table 5-3 – 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	School Streets	Traffic Management	Other	2026	2030	Sandwell Highways Team	DfT, Sandwell Council	No	Partially Funded	£100k - £500k	Planning	Daily average NO_2 by up to 0.4 µg/m^3 at key locations where scheme is implemented, & 18% reduction in car trips for school travel	Measured concentration of NO_2, & reduced trips by car	A successful trial was carried out at Ferndale Primary School ended January 2025	Locations must be chosen to ensure feasible implementation route, to avoid unintended consequences, and to ensure stakeholder engagement (e.g. parents)
2	Speed restrictions	Traffic Management	UTC, Congestion management, traffic reduction	2025	2030	Sandwell Highways Team	Sandwell Council	No	Fully Funded	£50k - £100k	Planning	Speed management may reduce annual mean NO_2 between 0.1 - 1.6 µg/m^3	Reduced roadside annual mean NO_2	Planning is underway to create designs and undertake public consultations	Road safety is the key driver but ideally locations should be appraised to identify the air quality impacts
3	Council Active Travel Planning Officer	Promoting Travel Alternatives	School Travel Plans	2025	2030	Sandwell Pollution Control Team	Sandwell Council	No	Partially Funded	£10k - £50k	Implementation	Daily average NO_2 by up to 0.2 µg/m^3 at key locations where active travel plans are implemented, & 10% reduction in car trips for school travel, however, the potential magnitude of the outcome would be subject to the number of trips affected	Number of active travel plans in place. Reduced car trips across District and increased mode shift to active and public transport	The Council employs an Active Travel Officer, and it is intended the position will become permanently attached to the Pollution Control Team	
4	Produce guidance in support of emerging local plan	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2027	2030	Sandwell Pollution Control Team & Sandwell Planning Team	Sandwell Council	No	Partially Funded	<£10k	Planning	Direct LAQ benefit not quantifiable, as measure complements and enables other actions in the development planning sector	Publication of guidance in support of local plan representing an update to the 2016 SPD (exact nature unknown)	-	It is currently unknown what mechanism or document type will best replace the current SPD in light of the expected abolition of SPDs.
5	Active travel promotion	Promoting Travel Alternatives	Other	2025	-	Sandwell Pollution Control Team	Sandwell Council	No	Partially Funded	<£10k	Implementation	0.2% overall emissions reduction,	Annual awareness campaign.	The Council employs an active travel officer, and	Further evidence is required to determine

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
												however, the potential magnitude of the outcome would be subject to the number of trips affected	Reduced car trips across District and increased mode shift to active and public transport	it is intended the position will become permanently attached to the pollution control Team	the extent of trips that may be captured
6	Auntie Duck	Public Information	Via other mechanisms	2025	2030	Sandwell Pollution Control Team	Sandwell Council, WMCA	No	Fully Funded	£10k - £50k	Implementation	Direct LAQ benefit not quantifiable, as measure complements and enables other actions via engagement and education	Percentage of all primary schools enrolled in Auntie Duck	25% of primary schools in Sandwell have received the book and resources. WMCA investing in the programme in 2025 to enable the regional distribution of the programme. The story has also been shared in libraries and at Sandwell General Hospital.	Adoption of the programme by WMCA will bring further benefits including increasing brand character awareness and uptake in primary schools. Supports consistency in AQ teaching in primary schools.
7	Accredited air quality education scheme for secondary schools	Public Information	Other	unknown	2030	WMCA & Sandwell Pollution Control Team	WMCA	No	Fully Funded	£10k - £50k	Planning	Direct LAQ benefit not quantifiable, as measure complements and enables other actions via engagement and education	Production of education scheme for secondary schools	WMCA undertaking a tendering process for creation of the education scheme for sharing with all local authorities / schools in the West Midlands -	
8	Enforcement of Sandwell's Boroughwide Smoke Control Area	Other	Other	2025	-	Sandwell Pollution Control Team	Sandwell Council	No	Partially Funded	£10k - £50k	Implementation	Direct LAQ benefit not quantifiable, as measure complements and enables other actions via engagement and education	Number of complaints, advice provided, visits undertaken, and enforcement notices issued	Smoke Control Area was consolidated to cover the whole Borough in July 2024	
9	Planning application support and review	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2025	-	Sandwell Pollution Control Team & Sandwell Planning Team	Sandwell Council	No	Partially Funded	£10k - £50k	Implementation	Direct LAQ benefit not quantifiable, as measure complements and enables other actions by ensuring new development	Air quality responses to planning applications	Ongoing	

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
												s follow best practice			
10	Targeted public engagement campaigns	Public Information	Via other mechanisms	2025	-	Sandwell Pollution Control Team	Sandwell Council	No	Partially Funded	<£10k	Planning	Direct LAQ benefit not quantifiable, as measure complements and enables other actions via engagement and education	Annual engagement program. Targeted engagement alongside other actions.	Public health campaigns planned for solid fuel burning, active travel and reducing car dependency	
11	Investment in new cycle infrastructure	Transport Planning and Infrastructure	Cycle network	2028	2030	Sandwell Transport Planning Team	Department for Transport – City Region Sustainable Transport Settlements	No	Partially Funded	>£10million	Planning	A potential 25% mode shift may be achievable on a given route dependent on the targeted investment	km of new cycleway	8.3 km of new cycle infrastructure completed since 2020	
12	Solid fuel burning health information campaign	Public Information	Other	2025	2027	Sandwell Pollution Control Team, Building Consultancy Team, HETAS	Sandwell Council	No	Not Funded	<£10k	Planning	Direct LAQ benefit not quantifiable, as measure complements and enables other actions via engagement and education	Gather baseline data on number of solid fuel burning appliances registered for use in Sandwell – monitor on-going registrations	Campaign materials in development	
13	Partnership with WMCA on implementation of the West Midlands Air Quality Framework	Policy Guidance and Development Control	Regional Groups Co-ordinating programmes to develop Area wide Strategies to reduce emissions and improve air quality	2025	-	WMCA & Sandwell Pollution Control Team	Sandwell Council WMCA	No	Partially Funded	£500k-£1 million	Implementation	Direct LAQ benefit not quantifiable, as measure complements and enables other actions	Attendance of regional group meetings and input into WMCA programs and documents	Ongoing	
14	Local Transport Plan	Transport Planning and Infrastructure	Other	2025	-	Transport for West Midlands	Department for Transport /WMCA and City Region Sustainable Transport Settlements	No	Funded	>£10million	Planning	Direct LAQ benefit not quantifiable, as measure complements and enables other actions	Data on numbers using public transport, cycling, and walking infrastructure	Plan should be implemented in 2026	The consultation on the bus network changes, closed in, 2025. A separate consultation on the Transport Strategy 2035 closes in September 2026
15	Work with trusted community advisors to deliver AQ messaging	Public Information	Via other mechanisms	Unknown	Unknown	Sandwell Pollution Control Team	Unknown	No	Not Funded	<£10K	Planning	Direct LAQ benefit not quantifiable, as measure complements and enables other Actions via	Frequency of collaborative meetings/engagement activities with trusted providers	16 faith centres took part in a project funded by a Defra Air Quality Grant between 2022 and 2023	

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
												engagement and education			
16	CIL / S106	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	2025	-	Sandwell Pollution Control Team, Sandwell Planning Team	CIL / S106	No	Fully Funded	<£10k	Planning	Direct LAQ benefit not quantifiable, as measure complements and enables other actions via engagement and education	Use of funds on air quality related projects	Previous funding spent on modelling speed reduction from 40 to 30mph on A4031 (All Saints Way, West Bromwich)	
17	Industrial permitting	Environmental Permits	Other measure through permit systems and economic instruments	2025	-	Sandwell Pollution Control Team	Sandwell Council	No	Fully Funded	£100k - £500k	Implementation	Ensuring compliance with permit will reduce local population exposure – reductions are dependent on the nature of the permitted activity	Number of permits reviewed and recording compliance with permit conditions	Additional staff resources provided to increase reviews of current permits and to ensure all businesses that require an environmental permit are bought into the permitting regime	
18	A1 permitting	Environmental Permits	Other measure through permit systems and economic instruments	2025	-	Sandwell Pollution Control Team, Environment Agency	Sandwell Council	No	Fully Funded	<£10k	Implementation	Ensuring compliance with permit will reduce local population exposure – reductions are dependent on the nature of the permitted activity	Number of formal consultations or interactions with the Environment Agency on A1 permitted sites per year	Additional staff resources provided in 2025 to increase capacity to inform the Environment Agency of any issues/concerns relating to A1 permitted sites	
19	Council zero-emission fleet	Vehicle Fleet Efficiency	Fleet efficiency and recognition schemes	2025	2030	Sandwell Council Fleet Services Team	Sandwell Council	No	Partially Funded	>£10 million	Planning	1.1t NO_X annual emissions per ICE car replaced with ZEV	Number and class of vehicles replaced with low or zero-emissions, and equivalent emissions saved	18 fully electric vehicles currently in use	Fleet will be replaced organically but additional funding may be required to enable ICE to be replaced with BEV, specifically specialist vehicles
20	Health partnership	Public Information	Other	2025	-	Sandwell Pollution Control Team & NHS	Sandwell Council	No	Partially Funded	<£10k	Implementation	Direct LAQ benefit not quantifiable, as measure complements and enables other actions	Frequency of collaborative meetings/engagement activities	Existing partnership already in place.	

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
21	Air Quality council website	Public Information	Via the Internet	2025	-	Sandwell Pollution Control Team	Sandwell Council	No	Partially Funded	<£10k	Implementation	Direct LAQ benefit not quantifiable, as measure complements and enables other Actions via engagement and education	Reporting on user access and tracking functionality.	Existing AQ page hosted on Council website	

5.3 Timescales of the AQAP Measures

Many of the measures set out in Table 5-3 are in the planning phase with a few already in progress. Timescales are provided in Table 5-3. Further timescale information for the top three actions is provided here.

For measure 1 – School Streets, the full timescale is currently unknown and will be defined as the measure progresses. Over the course of 2026 meetings will be held between the Pollution Control Team and the Highways Team to develop an implementation plan (including which schools the measure will be adopted at, and a strategy for consultation). It is expected that rollout will then begin in 2026 / 2027 with feedback obtained thereafter.

For measure 2 – Speed Restrictions, the following measures are planned, and implementation is expected by 2026:

- A457 Oldbury between Rood End Road to Spon Lane South. Revoking the existing 40 mph limit and reducing to 30 mph.
- A456 Hagley Road West and Hagley Road from Dudley Borough boundary to Birmingham borough boundary. Revoking the existing 40 mph limit and reducing to 30 mph.
- A4041 Queslett Road, Greta Barr. Revoking the existing 40 mph limit and reducing to 30 mph.
- Londonderry Road and Londonderry Lane, Warley. Reduction from 30 mph to 20 mph.

Additionally, a prioritisation process for the introduction of 20 mph zones in town centres and residential areas is expected to be completed by 2026, with implementation of the speed limits anticipated by 2030.

Finally, for measure 3 – Active Travel Planning, the first milestone is making the Active Travel Planning Officer role permanent, which is expected in 2026. The production of active travels plans will continue from now throughout the lifetime of the AQAP. The final milestone is the target of the measure for 75% of schools to have travel plans by 2030.

5.4 Air Quality Partners

Sandwell Council is collaborating with the West Midlands Combined Authority on the below actions:

- Accredited education scheme for all schools
- Partnership with WMCA on implementation of the West Midlands Air Quality Framework

Sandwell Council is collaborating with the NHS on the below actions:

- Health partnership
- Green travel and transport

5.5 Maintaining Safe Air Quality

Sandwell Council will continue to monitor local air quality throughout the Borough and review and report annually within the ASRs as required by LAQM regulations to ensure the objectives are maintained in the future. If new areas of concern arise, for example due to new development, or worsening congestion, additional monitoring will be installed to monitor these changes.

All new developments which have the potential to result in significant air quality impacts on or off-site will require an air quality assessment in line with the emerging local plan. Additionally, industrial developments which result in emissions to air will be subject to the Permitting Regulations. Together, the planning and permitting regimes will ensure that new developments are consistent with the maintenance of air quality standards.

Following five years of compliance with the AQO and the revocation of the AQMA, an Air Quality Strategy (AQS) will be produced and implemented to continue improving air quality and public health after the objectives have been achieved.

6 Quantification of Measures

6.1 Measure 1 – School Streets

A School Streets trial was carried out at Ferndale Primary School from July 2023 for 18 months. The trial was considered successful in terms of reduced complaints regarding parking and obstruction, however manual pedestrian counts did not reveal a significant difference before and after implementation, and further data was not collected.

Evidence for the air quality benefits of Measure 1 - School Streets have been identified by consulting a study on this issue.[35] Morning closures typically coincided with the peak traffic period, while afternoon does not, occurring well before 5 pm. Therefore, it is reasonable to expect the afternoon road closures to have less effect on pollutant concentrations than those in the morning. Average reduction in NO_2 during the school drop off period is estimated to be up to 6 µg/m^3 (23%) and expected to have reduced daily average NO_2 by up to -0.4 µg/m^3 (2%). 18% of parents reported driving to school less; 27% of parents reported walking to school more; and 6% of parents reported cycling to school more.

6.2 Measure 2 – Speed Reductions

The effect of reducing speed limits on air quality is not straightforward. On Birmingham Road, where monitor BP is situated, and where a speed limit reduction from 40 mph to 30 mph is proposed, re-calculating the emissions for the slower speed using Defra's EFT results in an increase in NO_X emissions of 15%. However, the EFT is a simple tool and assumes a constant speed, whereas in reality, driving in urban areas is frequently characterised by stop-start driving behaviour. This may be caused by congestion, junctions, or pedestrian crossings, for example. In these cases, it is particularly the acceleration phase which may disproportionately influence air quality. Lower speed limits may therefore have a positive effect on air quality, by reducing the time and distance spent accelerating.

Evidence from Wales,[36] where a default 20 mph in urban areas was introduced, suggest that the changes between 30 mph and 20 mph ranged from +0.5 µg/m^3 to -5.6 µg/m^3, showing the potential for these improvements to be quite substantial.

More locally, a study within Sandwell for a proposed reduction in speed limit from 40 mph to 30mph on All Saints Way[37] using microsimulation modelling that more accurately takes into account individual speed and acceleration behaviours than

[35] https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/environment-publications/school-streets-air-quality-study

[36] https://tfw.wales/about-us/transparency/publications/default-20mph-speed-limit/may-2024

[37] https://www.sandwell.gov.uk/downloads/file/2595/all-saints-way-a4031-modelled-impact-of-speed-reduction-on-air-quality

standard air quality modelling was undertaken in 2023. This showed that in this case, the total predicted (regional) NOx emissions at 30 mph were 13% lower than those at 40 mph, corresponding locally with small reductions of roadside NO_2 concentrations between -0.1 and -1.6 µg/m³.

It is likely therefore that reductions in speed limits elsewhere in the Borough (as planned) similarly correspond to small improvements in air quality of about this magnitude. However, as the changes are highly dependent on the exact characteristics of the individual road, it is not possible to predict the effect exactly.

6.3 Measure 3 – Active Travel Planning

Were each current car commuter (for work or school) to share a journey or choose active or public transport one-way once a week it would achieve a 10% reduction in car journeys to these sites each week. Assuming that 26%[38] of car journeys have a work or school destination within the Borough (in line with national statistics), this would be equivalent to a potential 2.6% reduction in total car journeys with this level of mode shift across all work and school car journeys.

This action targets 75% of schools in the Borough. As school related journeys make up 8% of car journeys, following the assumptions set out above this measure may more realistically be expected to bring about an 0.6% reduction in total car journeys. Car emissions made up 29% of the source apportionment of NO_2 in Sandwell therefore this may translate to a -0.2 µg/m^3 reduction in NO_2 concentrations.

No discrete goal is set for Active Travel Plans for businesses. The uncertainty of the quantification of this measure with respect to Active Travel Plans for businesses is raised following the adoption of different working patterns as a result of COVID-19. Therefore, further work to collect data on travel patterns and the number of car trips destined within the Borough may be a useful exercise to target these Plans where the impact will be largest.

Overall Quantification

The annual mean NO_2 objective was first achieved in 2022. Sandwell Council aims that the implementation of the outlined measures will result in continued compliance with the annual mean NO_2 objective and revocation of the Sandwell AQMA being carried out in 2027.

[38] https://www.gov.uk/government/statistics/transport-statistics-great-britain-2023/transport-statistics-great-britain-2022-domestic-travel

Appendix A: Response to Consultation

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

Consultee	Category	Summary of Response
Secretary of State – Department for Environment, Food and Rural Affairs (Defra)	**Statutory**	Defra provided constructive feedback on the AQAP in September 2025, recommending the inclusion of an AQMA map and updated NO_2 monitoring data through 2024. They acknowledged the strong public health context and detailed source apportionment using ANPR data and EFT. While no emissions reduction is required due to current compliance, future baselining was commended. Defra noted the need to complete stakeholder engagement details in the final report and welcomed the establishment of a multi-agency steering group. Recommendations • Public Health Director Involvement • Further local modelling, if possible, to assess the impact of speed reduction measures.
The Environment Agency (EA)	**Statutory**	The Environment Agency (EA) acknowledged the importance of air quality for public health and the environment but was unable to provide tailored feedback on the AQAP due to the high volume of plans they review. They emphasised their regulatory role under the Environmental Permitting Regulations and encouraged alignment with national and EU standards for $PM_{2.5}$, PM_{10}, and NO_2. The EA recommended adopting principles from the London Plan, such as air quality neutrality and positivity, and offered support as an Air Quality Partner under the Environment Act 2021 for sites contributing to exceedances. Their guidance included clear reporting of air quality status and mitigation efforts, integration of air quality into planning and transport strategies, robust assessments for construction and NRMM, improved waste site

Consultee	Category	Summary of Response
		management, and fostering regional collaboration and early engagement for high-impact developments.
UKHSA (United Kingdom Health Security Agency)	**Statutory**	UKHSA expressed strong support for the AQAP, commending its focus on NO_2 and $PM_{2.5}$ and alignment with public health priorities, including links to the Joint Strategic Needs Assessment and Health and Wellbeing Strategy. They recommended setting long-term targets aligned with WHO guidelines, incorporating health impact modelling, and using OHID Fingertips data to strengthen the public health case. Additional suggestions included fixing the Air Quality Dashboard link, addressing school-related pollution through anti-idling measures, and embedding equity and evaluation into interventions. They also encouraged continued public awareness campaigns and consideration of Defra's Air Quality Information System Review.
National Highways	**Statutory**	They attended the AQAP Steering Group meetings and received the draft AQAP and consultation survey via email, but did not submit a separate written response
All Local Authorities in West Midlands Region	**Statutory**	All local authorities in the West Midlands were sent the draft AQAP and consultation survey by email, but no separate responses were received.
Mums for Lungs	**Non-Statutory**	Mums for Lungs welcomed the draft AQAP and praised the Council's commitment to protecting children and vulnerable groups, particularly through initiatives like School Streets, active travel, and domestic wood burning enforcement. They encouraged greater ambition by recommending the use of WHO interim targets, inclusion of measurable milestones, lobbying for stronger national enforcement on wood burning, and addressing diesel vehicle impacts through alternatives to a Clean Air Zone. Overall, they viewed the plan positively but called for clearer accountability and stronger action on key pollution sources.

Consultee	Category	Summary of Response
WM-Net Zero – University of Birmingham	**Non-Statutory**	WM-Net Zero supports the AQAP's emphasis on walking and cycling, highlighting major public health benefits, especially for children and parents. Their Climate-LAT tool suggests that achieving Dutch-level cycling in the West Midlands could prevent 250 early deaths annually, with Sandwell benefiting most due to existing deprivation. They commend the Council's ambition to decarbonise its fleet but recommend reducing vehicle mileage to limit non-exhaust emissions. As transport emissions decline, gas appliances will become more significant NO_2 sources, as seen in central London. They suggest assessing these impacts further and considering the replacement of gas appliances in council housing with electric alternatives where feasible.
General Public	**Non-Statutory**	Survey feedback showed strong public support for improving air quality in Sandwell, with most respondents recognising its importance and backing AQAP measures such as active travel, education, and enforcement. School Streets and active travel were widely endorsed for health and safety benefits, though concerns were raised about displacement and enforcement. Views on speed limit reductions were mixed, with less confidence in their impact on air pollution. Key concerns included fairness, accessibility, infrastructure gaps, and feasibility of lifestyle changes. While many were open to modest personal actions, there was limited appetite for systemic changes. Overall, respondents supported the plan but highlighted the need for clearer communication, practical solutions, and inclusive implementation.

A detailed Consultation Survey Report has been produced, presenting a comprehensive analysis of the feedback received and outlining the Council's responses to the key themes and concerns raised. A copy of this report can be found on Sandwell Council's website at www.sandwell.gov.uk/AQAP.

Appendix B: Reasons for Not Pursuing Action Plan Measures

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

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Traffic Management	Low Traffic Neighbourhoods	This measure would be expensive and is likely to lack public support. Traffic restriction will already be implemented in key locations at key times through the School Streets measure (Action 1).
Promoting Low Emission Transport	Clean Air Zone	This measure would very expensive and little public support would be expected. Due to the compliance of the AQMA with the AQO, there is no mechanism to win national government funding. The measure would disproportionately affect those with non-compliant vehicles who are more likely to be socially deprived and therefore the measure may have negative social impacts.
Other	Home energy efficiency/installation	The source apportionment undertaken shows that domestic emissions are not a large source of emissions, unless houses with solid fuel burning were specifically targeted. However, this will be covered by the Solid Fuel Burning measure (Action 16). No local funding source has been identified to implement such a measure.
Other	Green infrastructure	Tree planting may have either positive or negative effects on air quality. It is uncertain what mechanism would be used to ensure that the plantings would be beneficial to air quality. The benefits of trees in a wider sense are recognised but this is better considered outside the context of the AQAP.

Action category	Action description	Reason action is not being pursued (including Stakeholder views)
Alternatives to private vehicle use/Promoting Travel Alternatives	Bus lane enforcement	This may help buses move throughout the network more effectively which may encourage greater uptake of public transport however any benefits to air quality arising from this measure would likely be very marginal.
Promoting Travel Alternatives	Cycling and Walking Infrastructure Plan	The Plan has been updated and is due to be updated imminently therefore there is no opportunity to further influence it.
Vehicle Fleet Efficiency	Taxi/licensed vehicle policy	This measure requires regional collaboration as firstly, introducing a policy in Sandwell alone may result in taxis registering elsewhere while still operating in Sandwell without improving their vehicle emission standards, and secondly, there is a large amount of cross-border movement of taxis within the Black Country. Currently, no regional policy is being discussed and therefore this measure is not currently feasible. Recognising that taxis may make up a disproportionately large percentage of emissions from cars due to the large distances travelled, this measure may be revisited at such a future time if the feasibility increases.

Appendix C: CRSTS Funded Schemes in Sandwell

Table C.1 – City Region Sustainable Transport Settlements (CRSTS) Funded Schemes in Sandwell

CRSTS Funded Scheme	Brief Description	Potential Impact on Air Quality
Cross City Bus Route Dudley – Birmingham – Druids Heath	Developing cross-city bus routes to improve bus services reliability and journey times, to be completed by 2027. Including a network for greater bus priority.	Increased public transport capacity through the centre of the Borough, through Oldbury and Smethwick along Birmingham Road.
Black Country Walking and Cycling Package	A Black Country wide package of walking and cycling interventions including improved provision of pedestrian and cycle infrastructure and crossing improvements.	A Borough-wide focus on improving and increasing active travel.
A461 Sandwell Walk, Cycle and Bus Corridor	Improving conditions for active travel through the provision of high-quality walking and cycling improvement. Improvements in bus journey time reliability.	Encourage modal shift away from private car use. Impact focused along Burnt Tree, Dudley Port, Horseley Heath and Great Western Way to Navigation Roundabout from Dudley.
A4123 Walk, Cycle and Bus Corridor	Improving active travel provisions with a two-way segregated cycle route spanning the whole length of the A4123 as well as bus priority infrastructure.	Encouraging modal shift away from private car usage along New Birmingham Road & Wolverhampton Road from Dudley to the A456.

CRSTS Funded Scheme	Brief Description	Potential Impact on Air Quality
Cross City Bus Routes Package West Bromwich – Birmingham – Chelmsley Wood	Developing cross-city bus routes to improve bus services reliability and journey times, including a network for greater bus priority.	Increased public transport capacity in the east of the Borough, starting in West Bromwich and going through Smethwick towards Birmingham.
Cross City Bus Route Dudley – Birmingham – Druids Heath	Developing cross-city bus routes to improve bus services reliability and journey times, to be completed by 2027. Including a network for greater bus priority.	Increased public transport capacity through the centre of the Borough, through Oldbury and Smethwick along Birmingham Road.
Black Country Walking and Cycling Package	A Black Country wide package of walking and cycling interventions including improved provision of pedestrian and cycle infrastructure and crossing improvements.	A Borough-wide focus on improving and increasing active travel.
A461 Sandwell Walk, Cycle and Bus Corridor	Improving conditions for active travel through the provision of high-quality walking and cycling improvement. Improvements in bus journey time reliability.	Encourage modal shift away from private car use. Impact focused along Burnt Tree, Dudley Port, Horseley Heath and Great Western Way to Navigation Roundabout from Dudley.
A4123 Walk, Cycle and Bus Corridor	Improving active travel provisions with a two-way segregated cycle route spanning the whole length of the A4123 as well as bus priority infrastructure.	Encouraging modal shift away from private car usage along New Birmingham Road & Wolverhampton Road from Dudley to the A456.

Sprint Bus Rapid Transit Phase 2 A34	Bus priority measures, with the provision of cycling enhancements, pedestrian crossings, and traffic signal optimisation.	Increased public transport capacity in the northeast of the Borough around Great Barr, Newton, Yew Tree and Hamstead.
Metro Tram Extension Wednesbury – Dudley	11 km extension of the current West Midlands Metro line from Wednesbury to Dudley, opening in 2025.	Increased public transport provision to encourage modal shift across the northwest of the Borough from Wednesbury to Dudley.
Merry Hill Construction for Metro Tram Extension	Second phase of the Metro extension to Merry Hill in Brierley, likely opening in 2027.	

Appendix D: Planning and Policy Detail

D1 National Planning and Policy Context

D1.1 Environment Act (2021)

The Environment Act 2021 amends the Environment Act 1995 and sets a new course for the UK's environmental policy post-Brexit. It includes provisions to establish a set of statutory environmental principles to guide future legislation and policy decisions and ensure environmental governance through an environmental watchdog, the Office for Environmental Protection (OEP).

Under Part IV of the Act, the government is mandated to develop a National Air Quality Strategy (AQS) which contains clear standards, objectives, and measures to improve ambient air quality, and to publish a report reviewing the AQS every five years (as a minimum and with yearly updates to Parliament), in the form of the Environmental Improvement Plan.

The Environment Act 2021 includes a proposal that the government set a range of new environmental targets including an annual mean concentration target and a population exposure reduction target for $PM_{2.5}$. Following through on these requirements, the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 came into effect, introducing the two targets described above. These legislative targets must be met at relevant monitoring stations by December 31, 2040. Full guidance on how target values should be considered in development control and local air quality control is not yet available. Interim Planning Guidance was published in October 2024. The guidance moves away from an exceedance-based approach and towards a minimisation of pollution approach. It recommends key sources of air pollution schemes submitted for planning applications are identified, and appropriate action to minimise emissions of $PM_{2.5}$ and its precursors are implemented as far as is reasonably practicable. If quantitative evidence is not available, a qualitative approach can be taken.

D1.2 Clean Air Strategy

In 2019, the UK government introduced the Clean Air Strategy 2019, a major component of its broader 25 Year Environment Plan, and the government's primary strategy for air quality. This strategy underscored a renewed governmental commitment to air quality improvements and also laid the groundwork for the development of more recent legislative changes as described above.

In recent years, air quality management has primarily focused on nitrogen dioxide (NO_2), and its principal source in the UK i.e. road traffic. However, the Clean Air Strategy broadens the focus to other areas. This shift in emphasis is part of a longer-term goal to reduce the levels of $PM_{2.5}$ in ambient air. It outlined comprehensive measures to combat air pollution, from reducing emissions across various sectors to

enhancing the country's monitoring and analytics capabilities. Recognizing that air pollution is a complex problem influenced by a range of factors, including industrial activity, agriculture, and domestic heating, the strategy advocated for a holistic approach to ensure cleaner air.

D1.3 Air Quality Strategy 2023

Functioning as a framework for local authority delivery of the above plans, a new Air Quality Strategy (AQS) was published in April 2023. This updated strategy is action-oriented, outlining specific roles for local authorities in support of achieving the new national $PM_{2.5}$ targets and other long-term air quality goals. It specifies that local authorities are expected to take action by controlling emissions from sources within their jurisdiction.

The AQS outlines proposals to tackle emissions from a range of sources. This includes providing clear and effective guidance on how an Air Quality Management Areas (AQMAs), Clean Air Zones (CAZs) and Smoke Control Areas interrelate and how they can be used by local government to tackle pollution.

D1.4 National Planning Policy Framework (2025)

The National Planning Policy Framework (NPPF) sets out the Government's environmental, economic and social policies and principles for land use planning in England and how these are expected to be applied, providing a framework within which locally prepared plans for development can be produced. The National Planning Policy Framework was first published in March 2012, and was last updated in December 2024.

Paragraphs 110, 187, and 199 and 224 of the NPPF provide advice on when air quality should be a material consideration in development management decisions.

Paragraph 192 states that:

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

D1.5 Integrated National Transport Strategy (emerging)

The Department for Transport is developing a strategy which will set the high-level direction for how transport should be designed, built and operated in England over the next 10 years.[39] It will set out a single national vision which will[40]:

- Put people who use transport and their needs at its heart; and
- Empower local leaders to deliver integrated transport solutions that meet the needs of their local communities.

A call for evidence ran from 28th November 2024 to 20th February 2025. A series of regional roadshows were held in February and March 2025 for the government to listen to ideas on how the strategy can support better integrated public transport and improve transport in rural areas, learning from successful integrated systems such as the Bee Network, as well as considering how cycling and walking can become the best choice for shorter journeys[41].

D1.6 Net Zero Strategy: Build Back Greener (2021)

The Net Zero Strategy – Build Back Greener was published in October 2021[42]. It sets out policies and proposals for decarbonising all sectors of the UK economy to meet the net zero target by 2050. This strategy builds on the 10-point plan for a green industrial revolution[43] which lays the foundations for a green economic recovery from the impacts of Covid-19. It aims to keep the UK on track for the carbon budgets, the 2030 Nationally Determined Contribution, and net zero by 2050. Key policies in relation to air quality are:

"By 2035 the UK will be powered entirely by clean electricity, subject to security of supply." p. 19

"An ambition that by 2035, no new gas boilers will be sold." p. 22

"[…] [the] 2030 commitment to end the sale of new petrol and diesel cars, and 2035 commitment that all cars must be fully zero emissions capable." p.24

"[…] enable [that] half of journeys in towns and cities to be cycled or walked by 2030." p. 25

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[39] https://www.gov.uk/government/calls-for-evidence/integrated-national-transport-strategy-a-call-for-ideas (accessed 14/04/2025)

[40] https://www.gov.uk/government/calls-for-evidence/integrated-national-transport-strategy-a-call-for-ideas/integrated-national-transport-strategy-a-call-for-ideas (accessed 14/04/2025)

[41] https://www.gov.uk/government/news/transport-minister-kicks-off-regional-tour-with-communities-to-shape-the-future-of-integrated-transport (accessed 14/04/2025)

[42] https://assets.publishing.service.gov.uk/media/6194dfa4d3bf7f0555071b1b/net-zero-strategy-beis.pdf (accessed 15/04/2025)

[43] https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution (accessed 15/04/2025)

"[…] a net zero rail network by 2050, with the ambition to remove all diesel-only trains by 2040." p. 25

D2 Regional Planning and Policy Context

D2.1 West Midlands Combined Authority Air Quality Framework and Implementation Plan

The West Midlands Combined Authority (WMCA) Air Quality Framework comprises a list of 145 potential 'options' to address poor air quality and the inequality of exposure. These options cover: Engagement and behaviour change; Domestic emissions and indoor air quality; Transport; Natural and built environment; Commercial, industrial and agriculture; Public health; Planning, policy, governance and mechanisms for change; Monitoring and digital; and Climate and Net Zero Considerations.

The West Midlands Combined Authority (WMCA) Air Quality Framework Implementation Plan summarises the priority measures from the WMCA Air Quality Framework which will be progressed or delivered between 2024 and 2026. The delivery of this Framework Implementation Plan requires collaboration across the region, including local authorities, and this plan complements existing progress being delivered by Transport for West Midlands and local authorities.

D2.2 Black Country Core Strategy (2011)

The Black Country Core Strategy sets out the planning policies to achieve three major directions of change: Sustainable Communities, Environmental Transformation, and Economic Prosperity[44]. The scale of growth proposed in the Black Country Core Strategy will have impacts upon the local environment, including levels of air pollutants. New developments may have specific and/or cumulative impacts on air quality which require mitigation in order to make the development acceptable.

Policy ENV8 (Air Quality) sets out the policy framework for addressing air quality through the planning system:

ENV8: *"New residential or other sensitive development, such as schools, hospitals and care facilities, should, wherever possible, be located where air quality meets national air quality objectives.*

Where development is proposed in areas where air quality does not meet (or is unlikely to meet) air quality objectives or where significant air quality impacts are likely to be generated by the development, an appropriate air quality assessment will be required. The assessment must take into account any potential cumulative

[44] https://blackcountryplan.dudley.gov.uk/t1/p2/ (accessed 15/04/2025)

impacts as a result of known proposals in the vicinity of the proposed development site and should consider pollutant emissions generated by the development.

If an assessment which is acceptable to the local authority indicates that a proposal will result in exposure to pollutant concentrations that exceed national air quality objectives, adequate and satisfactory mitigation measures which are capable of implementation must be secured before planning permission is granted."

Policy TRAN2 sets out the policy framework for managing transport impacts of new developments:

TRAN2: *"Planning permission will not be granted for development proposals that are likely to have significant transport implications unless applications are accompanied by proposals to provide an acceptable level of accessibility and safety by all modes of transport to and from all parts of a development including, in particular, access by walking, cycling, public transport and car sharing. These proposals should be in accordance with an agreed Transport Assessment, where required, and include implementation of measures to promote and improve such sustainable transport facilities through agreed Travel Plans and similar measures."*

D2.3 West Midlands Good Practice Air Quality Planning Guidance (2014)

In response to changes in the assessment of air quality impacts and the consideration of cumulative impacts, the West Midlands Good Practice Air Quality Planning Guidance was developed as part of the West Midlands Low Emissions Towns & Cities Programme[45]. The guidance aims to set out:

- A clear and consistent approach to assessment of planning applications, mitigation and compensation, thus defining what is meant by 'sustainable' in air quality terms.
- Provision of a simplified approach, reducing the requirements for Air Quality assessment while promoting the integration of mitigation into scheme design; and
- Examples of existing West Midlands development schemes incorporating low emission initiatives.

[45] https://www.bing.com/ck/a?!&&p=50c5a895a52c0b8351d8495030bfd3e620b6bd75069ee2c04f6decfda99dcf2eJmltdHM9MTc0NDY3NTIwMA&ptn=3&ver=2&hsh=4&fclid=27ebbfeb-571d-60da-03e2-aa7d563a61b1&psq=West+Midlands+Good+Practice+Air+Quality+Planning+Guidance+(2014)&u=a1aHR0cHM6Ly93d3cuYmlybWluZ2hhbS5nb3YudWsvZG93bmxvYWQvZG93bmxvYWRzL2lkLzE2ODMyL2ViZDEzX2xldGNfZ29vZF9wcmFjdGljZV9haXJfcXVhbGl0eV9wbGFubmluZ19ndWlkYW5jZV9tYXlfMjAxNC5wZGY&ntb=1 (accessed 15/04/2025)

D2.4 Black Country Air Quality Supplementary Planning Document (SPD)

The SPD was adopted in October 2016 and covers all four local authority areas: Dudley, Sandwell, Walsall and Wolverhampton[46]. It sets out guidance for dealing with air quality and is aimed at all those involved in the submission and determination of planning applications where air quality needs to be addressed. This is to encourage more sustainable development and to ensure future improvements in air quality.

The SPD supplements Policy ENV8 (Air Quality) of the adopted Back Country Core Strategy (2011) and embraces the West Midlands Good Practice Air Quality Planning Guidance (2014).

In summary the SPD is designed to:

- Explain why air quality is important in the Black Country and describe the existing policy framework.
- Incorporate air quality mitigation measures within new developments to offset the incremental creep in pollutant emissions.
- Present the method for identifying development proposals where an air quality assessment will be required, and the processes involved.
- Propose various options for site specific mitigation to protect future occupiers from poor air and how such measures will be secured and delivered; and
- Confirm where a damage calculation is required and payment made to the local authority where mitigation is not appropriate.

D2.5 Movement for Growth: The West Midlands Strategic Transport Plan

The Strategic Transport Plan sets out the vision, priorities, approach and commitment to building a sustainable infrastructure system over a 20-year period[47]. The transport policies cover economic growth and economic inclusion, population growth and housing development, environment, public health and social well-being. The policies related to air quality are:

ENV2: *"To help tackle climate change by ensuring large decreases in greenhouse gas emissions from the West Midlands Metropolitan Area [the Metropolitan Area includes Birmingham, Coventry, Sandwell, Solihull, Walsall and Wolverhampton.]"*

PUBH1: *"To significantly increase the amount of active travel in the West Midlands Metropolitan Area."*

The strategic transport plan is currently being updated, as described below.

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[46] https://www.sandwell.gov.uk/downloads/file/797/black-country-air-quality-spd (accessed 15/04/2025)

[47] https://www.tfwm.org.uk/media/3ukj3yw0/movement-for-growth.pdf (accessed 15/04/2025)

D2.6 West Midlands Local Transport Plan (emerging)

The Local Transport Plan is currently emerging[48]. It will comprise a Core Strategy, six Big Moves (detailed policies across six thematic areas for action), four area strategies (including one for the Black Country), and an Implementation Plan. Once all elements of the new plan are agreed, the new Transport Plan will be formally adopted, replacing the current version as the region's statutory plan. The core strategy has already been agreed on for the new Transport Plan.[49] It proposes a new vision for travel in the West Midlands where people can thrive without having to drive or own a car. To get there the Core Strategy sets out the need for actions to help us improve accessibility, reduce traffic, and electrify transport.

The Big Move documents have been drafted and are currently undergoing consultation[50]. They are:

- Behaviour Change
- Accessible and inclusive places
- Walk, wheel, cycle and scoot
- Public Transport and Shared Mobility
- A Safe Efficient, and Reliable transport network
- A green transport revolution

The Black Country Area Strategy and Implementation Plan have not yet been published.

D2.5 Black Country Ultra-Low Emission Vehicle (ULEV) Programme

The Back Country ULEV Programme delivers the aims of the Black Country ULEV Strategy[51]. It involves the installation of public charge points on and off highway of varying charging speeds, initially through the Office for Zero Emission Vehicles (OZEV) On-Street Residential Charge Point Scheme (ORCS).

The Black Country ULEV Strategy[52], published in May 2020, aims to accelerate the update of ULEVs across the area in anticipation of a nationwide 2025 ban on the sale of petrol and diesel vehicles. The Government's proposed ban is aimed at combating the environmental and public health implications of transport emissions. The strategy

[48] https://www.tfwm.org.uk/who-we-are/our-strategy/local-transport-plan/ (accessed 15/04/2025)

[49] https://www.tfwm.org.uk/media/1p4ccrwt/wm-ltp-2023-core-strategy-v2-1.pdf (accessed 15/04/2025)

[50] https://www.tfwm.org.uk/media/uuuhqpb4/big-moves-summary.pdf (accessed 15/04/2025)

[51] https://www.blackcountrytransport.org.uk/projects/ultra-low-emission-vehicle-programme.html (accessed 15/04/2025)

[52] https://www.blackcountrytransport.org.uk/downloads/key-documents/final-report-ulev-strategy-black-country.pdf (accessed 15/04/2025)

recommends the infrastructure and policies required across the Black Country to support the transition.

For Sandwell, the strategy recommends the following strategic infrastructure locations for installing charge points:

- Oldbury.
- Oldbury Roundabout; and
- Blackheath.

Active travel was recognised to be lagging across the whole area, and suggestions such as promoting bike schemes, developing dedicated lines for cyclists and public engagement with individual transport advice were made to improve active travel.

D2.6 Black Country Walking and Cycling Strategy and Implementation Plan

The Black Country Walking and Cycling Strategy and Implementation Plan was published in 2016[53]. The plan brings together a list of prioritised infrastructure investment schemes that support active travel to become more attractive.

The aims of the cycle strategy are to:

- Make cycling inviting and attractive to everyone.
- Make cycling safe and secure.
- Make cycling easy and intuitive; and
- Normalise cycling to reduce inequalities.

The aims of the walking strategy are to:

- Provide safe, pleasant-to-use route infrastructure.
- Provide high-quality networks with access from neighbourhoods and transport hubs.
- Have an inviting and engaging urban environment.
- Ensure access for all users.
- Rebalance the environment to make it calm and safe for all.
- Provide attractive local streets and spaces.
- Provide access to information to enable clear wayfinding; and
- Promote walking as inclusive and health transport mode.

[53] https://go.walsall.gov.uk/sites/default/files/2022-07/Black%20Country%20cycling%20and%20walking%20strategy.pdf (accessed 17/04/2025)

The plan identified a walking focus area at Sandwell General Hospital due to multiple metro stops and the bus interchange, and a cycling focus area in West Bromwich.

D2.7 West Midlands Local Cycling and Walking Infrastructure Plan

Published August 2018, the West Midlands Local Cycling and Walking Infrastructure Plan (LCWIP) has identified cycling and walking improvements required at a local level to enable a long-term approach to developing local cycling and walking networks. The West Midlands LCWIP aims to identify key opportunities within each local authority as well as coordinate plans across the local authorities to ensure a consistent and aligned approach to delivery and ensuring these plans are integrated into policies, strategies and delivery plans in the West Midlands.

D2.8 West Midlands Net Zero 5 Year Plan

In March 2021, the Net Zero 5 Year Plan was adopted, and it sets out how to create the right conditions for accelerating delivery and raising ambition to position the West Midlands as a leader in addressing climate change and future proofing the region[54]. It considers 15 goals with the ambition to achieve a 33% reduction in emissions by 2026, in line to achieve net zero emissions by 2041. The top five decarbonisation priorities are:

- Domestic energy efficiency measures and heating retrofitting.
- Commercial energy efficiency measures.
- Modal shift towards active travel measures.
- Increased uptake of electric vehicles; and
- Planting trees and enhancing natural capital.

To achieve these emissions reductions Sandwell Council has set the target to become carbon neutral as an organisation by 2030, and as a borough by 2041[55]. Furthermore, they are currently working on the West Bromwich town centre heat network which is currently at Commercialisation stage with the first consumers connecting in late 2027 at the earliest.

[54] https://www.wmca.org.uk/documents/environment-energy/home-of-the-green-industrial-revolution/introduction/wm2041-five-year-plan/#:~:text=In%20March%202021%20the%20West%20Midlands%20Combined%20Authority,in%20addressing%20climate%20change%20and%20futureproofing%20the%20region. (accessed 17/04/2025)

[55] https://www.wmca.org.uk/media/wumiikpt/wm-net-zero-fyp-summary-tech-report.pdf (accessed 17/04/2025)

D3 Local Planning and Policy Context

D3.1 Sandwell Local Plan (emerging)

The Sandwell Local Plan was submitted to the Secretary of State in December 2024 and is currently undergoing examination[56]. The Local Plan is Sandwell Council's strategy for the period 2024 – 2041. It sets out 52 policies which fall into the following categories:

- Framework Policies
- Natural and Historic Environment
- Climate Change
- Health and Wellbeing
- Housing
- Economy
- Sandwell's Centres

Policy SHW3, under Health and Wellbeing, relates to Air Quality. Under this policy, the Local Plan requires development and other land use proposals to promote integration of cycling, walking, public transport and electric charging points as part of their transport provision; promoting and supporting a modal shift from private motorised vehicles to the use of public transport, cycling and walking; appropriate Air Quality Assessments where significant air quality impacts are likely to be generated from proposed developments; and siting residential or other sensitive developments in areas of existing, or achievable, compliance with air quality objectives.

There are also a number of policies anticipated to affect air quality more indirectly, including:

- Policy STR5 – Creating Coherent Networks for Cycling and Walking (to encourage safe active travel)
- Policy STR6 – Influencing the Demand for Travel and Travel Choices (to reduce demand for car usage)
- Policy STR8 – Parking Management (to balance economic development with encouragement of alternative measures)
- Policy STR9 – Planning for Low Emission Vehicles (including facilitation of charging points)

[56] https://www.sandwell.gov.uk/downloads/file/3260/sandwell-local-plan-reg-19-publication-version-september-2024- (accessed 17/04/2025)

- Policy SCC1 – Energy Infrastructure and Policy SCC2 – Reducing operational carbon in new build non-residential development (specifically, the use of fossil fuels and connections to the gas grid will not be considered acceptable)

D3.2 Sandwell Climate Change Strategy 2020 - 2041

In March 2020 Sandwell Council declared a Climate emergency and, therefore, has adopted the goal to become carbon neutral as an organisation by 2030, and as a borough by 2041[57]. The Climate Change Strategy represent a high-level strategy for meeting targets that will enable Sandwell to make a fair contribution to reducing UK emissions. This strategy is accompanied by the Corporate Climate Change Action Plan 2022 – 2025.

D3.3 Sandwell Corporate Climate Change Action Plan 2022 – 2025

The Corporate Climate Change Action Plan was put together to set out the Council's priorities and proposed actions to meet the 2030 and 2041 targets for reaching net zero as described in the Climate Change Strategy[58]. The Action Plan covers six key themes:

- Council estate and operations.
- The built environment.
- Transport.
- Waste.
- Adaptation; and
- Natural Capital

The objectives related to air quality include:

1.5 *"Reduce carbon emissions from fleet vehicles and business milage".*

1.7 *"Support staff in reducing emissions through behavioural change".*

2.2 *"Reduce emissions from businesses".*

3.1 *"Promotion of sustainable travel".*

3.3 *"Establish planning policies that encourage developers to promote sustainable transport choices".*

The Council recognises that air quality is an important issue in Sandwell, and improving air quality does not only benefit public health but also climate change.

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[57] https://www.sandwell.gov.uk/downloads/file/39/climate-change-strategy (accessed 17/04/2025)

[58] https://www.sandwell.gov.uk/downloads/file/40/climate-change-action-plan (accessed 17/04/2025)

D3.4 Sandwell Cycling and Walking Infrastructure Plan

Sandwell Cycling and Walking Infrastructure Plan (SCWIP) was published in January 2020 and work is currently underway on the 2nd iteration. This Plan builds on work already done as part of the West Midlands LCWIP at a regional level. The SCWIP aims to:

- Assist the implementation of the West Midlands Strategic Cycle Network
- Identify the local networks within Sandwell with a prioritised plan for delivery
- Coordinate the plan with existing plans for the Black Country and the West Midlands to ensure a consistent and aligned approach to delivery
- Integrate this plan into a clear planning and transport policy document and delivery plan, taking into consideration the overarching West Midlands strategies for planning and transport.

D3.5 Sustainable Modes of Travel Strategy for Schools in Sandwell (SMOTS)[59]

The SMOTS was updated in 2019, it reviews the travel needs of pupils and students in Sandwell, what provision is already available and sets out how Sandwell will promote sustainable travel to and from schools and colleges. This Strategy includes three specific objectives: ensuring all schools have School Travel Plans which are regularly monitored, reviewed and updated; ensuring all young people and parents are aware of the travel options; and ensure that Sandwell builds on its achievements to date and reduces the number of pupils travelling to and from school by car.

[59] Sustainable Modes of Travel Strategy for Schools in Sandwell (2019)

Appendix E: Minutes from Steering Group Meetings

E1 Steering Group Meeting 1

Meeting Name	Subject	Attendees
Steering Group Meeting	Sandwell Air Quality Action Plan Steering Group Meeting	Alison Bishop (Sandwell Council), Andrew Bean (National Highways), Becky Willson (Sandwell Council), Christopher Henderson (National Highways), Duncan Urquhart (AECOM), Ed Wicks (Living Streets), Elizabeth Stevens (Sandwell Council), Ellis Langdon (AECOM), Fiona Gee (Sandwell Council), Izzy Reeves (AECOM), Jackie Taylor (Sandwell), Jake Thrush (Transport for West Midlands), Jenny Chidley (Sandwell Council), Keith Allcock (Sandwell Council), Liann Brookes Smith (Sandwell Council), Lina Martino (Sandwell Council), Margaret Gardiner (Sandwell Council), Nichola Egan (AECOM), Paul Meadows (Sandwell Council), Phil Kingston (Sandwell Council), Sarah Redfern (National Highways), Shane Middleton (Sandwell Council), Stephen Brown (British Cycling), Suzy Street-Hall (Sandwell Council), Vivienne Marsh (NHS)
Meeting Date	**Time**	
27 February 2025	14:30 – 15:30	

Agenda

- Introductions
- Outline of the Air Quality Action Plan Process
- Open discussion:
    - Current understanding of the air quality issues in Sandwell.
    - What work are you currently doing/which policies are currently in place that support air quality improvements in Sandwell.
    - What barriers exist to improving air quality?
    - What should Sandwell's priorities be over the lifetime of the AQAP to reduce emissions and improve local air quality?
- Any other business
- Next steps

Actions Summary

Action	Assigned to
Meeting minutes to be written and circulated	AECOM & Elizabeth Stephens

Action	Assigned to
Providing any information that would be useful about schemes funded by Cross One for 2022 – 2027	Jake Thrush
Discussion about PRISM traffic models	AECOM & Jake Thrush
Providing the Sandwell cycling and walking infrastructure plan	Becky Willson
Review outcomes and issues raised	AECOM
Providing climate change policies	Phil Kingston
Providing relevant documents as discussed in meeting	All attendees

Minutes

Topic	Comments
AQAP Process	• Further steering group meetings are proposed for w/c 7th April and mid June • Step 1 – Baseline (mid-February to late March). This stage involves demonstrating a good understanding of current baseline air quality including technical analysis of emissions, and policy and public health context. • Step 2 – Longlist (late March – April). A long list of potential actions will be identified, proportionate to the scale of the problem, across a range of policy areas. • Step 3 – Short list (mid-April – mid May). Not all of the long-list actions will be viable. A short list will be produced for the top 3 – 5 measures that provide the most significant impact on emissions, and this impact will be quantified. • Step 4 – AECOM will draft an AQAP using Defra's standard template, produced at the start of June. • Step 5 – Statutory consultation and initial appraisal by Defra of Draft AQAP. • Step 6 – Final AQAP is produced incorporating appraisal and consultation comments.
Current Baseline	• In the 2023 Annual Status Report, one diffusion tube is "non-compliant" in terms of revoking an AQMA as it was less than 10% below the relevant objective – 39.8 µg/m^3 • This diffusion tube is located on A457 Birmingham Road – in "zone 3" • National Highways raised that from previous experience, it would be difficult to obtain Government funding where the monitored concentration is below 40 µg/m^3 and the exceedance is marginal, as in this case. • There is a Clean Air Zone in Birmingham – it was queried what impacts had made been achieved in Birmingham? • It was queried what is the impact from local businesses and industry on air quality and what are they doing to minimise their impacts?
Children & Schools	• Implementation of school streets/Walking streets – a pilot was carried out at Ferndale Primary at the end of last year which was anecdotally very successful • Living Streets are carrying out school route audits • Raise awareness of the issues associated with idling • Encouraging children to cycle to school • There is a relationship between air pollution and children's health, in particular asthma • Raising awareness and understanding with healthcare professionals to support patients
Active Travel	• Sandwell cycling and walking infrastructure • Low baseline for a cycle network in Sandwell

Topic	Comments
	• Having a good cycle network is a way to get people out of their cars and encourage modal shift • Use of canal towpaths for cyclists or pedestrians
Current fleet and transition to electric vehicles	• Sandwell has low car ownership relative to the UK • Electrification of the bus fleet and council vehicles/waste vehicles • Rolling programme for fleet electrification as leases and licences end, chargers have been/will be installed • Assisting Serco transitioning their waste vehicles to EV by putting in chargers • Electric vehicles are unlikely to be the solution as they still have emissions from brake wear and causing congestion as those vehicles are still on the road
Public Transport	• Electrification of the bus fleet • CRSTS programme – five-year capital programme of transport schemes from 2022 – 2027, with another five-year scheme starting in 2027. The schemes will promote public transport, cycling and walking. For example, the Cross City bus route 82/87.
Bonfires	• Highlighted as a potentially significant source of particulate matter
Hot spots/focus area	• Noted the AQAP should specifically target where it's going to benefit children and the most vulnerable people, for example healthcare settings, rather than pollution hotspots
Domestic emissions	• Heat network gone to commercialisation • Devolved funding will help support roll outs of improving insulation and increasing EPC ratings of resident houses which will help reduce emissions from boilers

Documents provided:

- https://www.ncmd.info/publications/child-deaths-asthma-anaphylaxis-allergy/
- https://www.asthmaandlung.org.uk/living-with/air-pollution
- https://blackcountry.icb.nhs.uk/your-health/health-advice/asthma/asthma-friendly-schools

E2 Steering Group Meeting 2

Meeting Name	Subject	Attendees
Steering Group Meeting 2	Sandwell Air Quality Action Plan Steering Group Meeting 2	Alison Bishop (Sandwell Council), Andy Thorpe (Sandwell Council), Carl Mercer (Sandwell Council), Claire Hammond (Sandwell Council), Claire Williams (West Midlands Combined Authority), David Gallagher (Transport for West Midlands), Ed Wicks (Living Streets), Elizabeth Stephens (Sandwell Council), Ellen Blakey (Sandwell Council), Fiona Gee (Sandwell Council), Jake Thrush (Transport for West Midlands), Jenny Chidley (Sandwell Council), Lina Martino (Sandwell Council), Louise Bodlovic (Sandwell Council), Luke Hadlow (Black Country Transport), Margaret Gardiner (Sandwell Council), Matthew Pain (Black Country Transport), Nichola Egan (AECOM), Paul Meadows (Sandwell Council), Phil Kingston
Meeting Date	**Time**	
8 April 2025	09:30 – 11:30	

	(Sandwell Council), Sarah Redfern (National Highways), Shane Middleton (Sandwell Council), Suzy Street-Hall (Sandwell Council), Tina Okewale (Sandwell Council)

Agenda

- Introductions
- West Midlands Combined Authority – behaviour change update
- Outline baseline assessment findings
- Outline baseline assessment discussion
- Air quality priorities discussion
- Long list of measures – targeted measures
- Long list of measures – strategic measures
- Open discussion
- Any other business
- Next steps

Actions Summary

Action	Assigned to
Meeting minutes to be written and circulated	Izzy Reeves & Elizabeth Stephens
Discuss the feasibility targeted measure 1 and 2 with the highways team	Nichola Egan, Elizabeth Stephens & Andy Thorpe
Provide a baseline of how many people do own cars, how many two car households	Nichola Egan
Reduce the long list based on options raised in this meeting and undergo a filtering process to get a short list	Nichola Egan, Elizabeth Stephens & Andy Thorpe
Quantify the short list actions in terms of impact on air quality	Nichola Egan & Izzy Reeves
Finish first draft of AQAP	Nichola Egan & Izzy Reeves

Minutes

Topic	Comments
Behaviour change update (West Midlands	• Behaviour change hub at Transport for West Midlands • Three main strands to work being done:

Topic	Comments
Combined Authority)	— Network mitigations. Identifying programmes of significant travel disruption, task forces come up with mitigation of different ways for communities to continue to travel sustainably during that disruption. — Travel demand management. Looking at whenever the transport network is disrupted, how can the demands of the community still be met. Mainly this revolves around communication and messaging that is specific to different areas and communities. — Behaviour change project delivery. Delivering activities and incentives across the region. Current priorities are areas of travel disruption, areas of deprivation, workplace and education engagement, work with job seekers, work with large troop generators such as football clubs. • In Sandwell, there is also the innovation team arm which works closely with WMCA and looks at research and new projects that are coming out that could help in this area. • Air quality specific material will become part of moving on workshop for year 6's. WMCA are keen to get that into as many Sandwell schools within priority areas as possible. • Run Transport Skills Academy which is about upskilling a local authority's workforce, apprentice or new people looking to enter the transport workforce.
Baseline	• Nitrogen dioxide is primarily from road traffic and is the pollutant that Sandwell has declared an air quality management area for. — Concentrations have been broadly reducing over time. — In Sandwell concentrations are a little bit higher than in the UK — There are three monitoring sites which have particularly high NO_2 concentrations. BP is the highest monitor; this is on Birmingham Road. When we adjust the concentration to reflect the nearest houses (rather than the street furniture that the diffusion tube is located on), only BP remains within 10% of 40 µg/m^3, the other two sites fall below 10% below 40 µg/m^3. • Particulate matter – PM_{10} and $PM_{2.5}$, is an increasing focus due to known health risks. — $PM_{2.5}$ contributes to 5.9% of annual deaths from all causes in Sandwell. This is higher than West Midlands and England. • BP monitoring site is still considered non-compliant for Defra purposes; it represents maybe 10 – 15 properties. — This site is not following the trend of a reduction from 2019 to 2023. The 2022 and 2023 concentrations are higher than 2019. — We think this is caused by a change in the road. At the start of the pandemic, parking used to be on the road and so the first lane of the dual carriageway couldn't be used by traffic. However, there was a chance to move the parking onto the pavement and therefore the first lane is now open for traffic so the exhaust emissions from the traffic are physically closer to the houses than they used to be. • A very close correlation between how the air quality is improving in Birmingham and how the air quality is improving in Sandwell following the implementation of the Clean Air Zone in Birmingham. • Borough wide Smoke Control Area where there were limitations on smoke emitted from chimneys have to be an exempt appliance and approved for use based on comparative cleanness. This came into force in 2024. • 38 industrial permits from the Environment Agency and 98 local industrial permits. These cover a range of industries including food, power, metals, chemicals and waste disposal. • Air quality is the largest environmental risk to public health in the UK. It can have particular impacts on vulnerable groups of society including children, the elderly and those with existing health conditions.

Topic	Comments
	— Sandwell has a very young population with significantly more children aged under 15 than England and West Midlands. • Higher hospital admission numbers for asthma in children and young people in Sandwell than in the country as a whole. — Less elderly people over the age of 65 than England and West Midlands. • Sandwell has an above average level of deprivation considering indices of multiple deprivation, it is the 12th most deprived local authority in England. • Deprivation is associated with poor air quality, air quality outcomes, rates associated with poor health, it's associated with greater exposure. — This is important to consider when thinking about the measures to enact. • Active travel up take in Sandwell is low compared to region and England. • Policies surrounding transport, active travel, climate, domestic emissions, industrial emissions are all interlinked with air quality.
Discussion of baseline	• The 40 µg/m^3 legal limit is for chronic exposure (I.e. over a year), there are other objectives set for short-term exposures which would be relevant to pedestrians on the footpath where the diffusion tube is located. These limits are considerably higher and are at no risk of exceedance at this monitoring site.
Baseline air quality assessment	• Referenced an automatic number plate recognition survey carried out for All Saints Way to understand a fleet breakdown for Sandwell based on vehicle type and euro classifications. — In general, the fleet in Sandwell is older than the national fleet • This is not surprising in the context of Sandwell being a deprived area, people are holding onto their cars for longer and not replacing them as frequently as other areas of the country. — Only a small proportion, but largely in line with the national fleet, of electric hybrids • We looked at the type of vehicles using Birmingham Road based on data obtained from Viva City and from the Department for Transport traffic counts. — 80% cars in this area with some buses and some heavier vehicles. — However, buses and heavy good vehicles are more polluting than an individual car so even though they are a small proportion of the fleet on this road, they have an outsize contribution on emissions • Looking at the breakdown of emissions for NO_2 — Largest contribution is from diesel cars (22%) — 5% from petrol cars — Buses and HDV are larger than the fleet percentage, their contribution is proportionally more • Buses are 4% of emissions and 1% of fleet • HGVs are 8% of emission and 4.7% of fleet — Approximately 50% from background sources • For background concentrations: • Road comprises 43% • Industry comprises 31% • Domestic comprises 8% • Other transport comprises 3% • Remaining 31% was "Other" • Source apportionment for PM_{10} — 33% of road contribution from petrol cars — 26% of road contribution from diesel cars — 16% of road contribution from LGVs — 17% of road contribution from HGVs

Topic	Comments
	— Background contributions are assessed separately • 71% was “other”
	• Source apportionment for $PM_{2.5}$ — 31% of road contribution from petrol cars — 25% of road contribution from diesel cars — 16% of road contribution from LGVs — 18% of road contribution from HGVs • Background contributions are assessed separately • 66% from “other” • There was a study of sources of $PM_{2.5}$ at urban sites done by Birmingham University this year — Approximately 25% assigned to biomass burning – like log burners, bonfires — Approximately 22% assigned to roads – exhaust emissions, brake, tyre and road wear — Approximately 23% was secondary pollution whereby other pollutants are emitted to the air and then particulate matter is formed as a secondary feature as a function of atmospheric chemistry • This shows that what we do to improve exhaust emissions to help reduce NO_2 will also improve particulate matter, but the bigger area of focus is biomass burning for particulate matter.
	• When we’re considering the measures to improve air quality, we need to consider the percentage of the total emissions that each vehicle type contributes • A reduction of 21.8% NO_X emissions is required at monitor BP for Sandwell to be Defra compliant, • Between 2022 and 2023, there was only a very small decrease in the amount of NO_2 at the site, if this rate of improvements were to continue, Sandwell would still not be compliant in 2030 at the end of the lifespan of this AQAP. — Therefore targeted measures are required as natural fleet turnover is not guaranteed to get the concentration below 36 µg/m^3 by 2030
Priorities	• Priority is achieving compliance with the annual mean NO_2 objective within the AQMA by reducing the concentrations at the BP monitor • Protecting the health of young people within the borough by measures targeted to schools in line with Sandwell’s goal to be a UNICEF child friendly borough • Driving behaviour change, particularly focusing on active travel • Collaborating with the West Midlands Combined Authority because of the regional contribution to the air pollution • Raising awareness and enforcement of the smoke control area as this is an effective way to bring down $PM_{2.5}$ • Working with Sandwell’s industrial area/permitted installations on best practice and emission reductions • Ensuring air quality is properly considered throughout the planning process
Discussion of priorities	• Driving behaviour change, particularly focusing on active travel — This is not as straightforward as it sounds as very few people can walk to work or all the way to where they need to go, often they make connections on public transport. You need confidence to ride a bike as well as regular maintenance. — There are important elements to active travel: • Having safe infrastructure for active travel and connections to public transport

Topic	Comments
	• Behaviour change – getting people to change their behaviour and adopt that — This will have co benefits for public health and climate — The Bikeability programme is key for teaching children to cycle in schools — There is a west midlands cycle hire scheme across the region which is good for connecting public transport
Targeted measures – measures focused on the exceeding monitoring site	• The reversal of TRO (Experimental) Order 2017 to revert back to on-road parking — Parking will be in the first lane, similar to the situation on the other side of the Rood End Road Roundabout. This will move the emissions source physically further away from residences. • Cycle lane route 6 – Oldbury to Galton Bridge Station — Encourage modal shift – from cars to active travel. May also assist in creating distance between residences and emissions • Cross City Bus Route Dudley – Birmingham – Druids Heath — Increased public transport capacity through Oldbury and Smethwick. Encourage modal shift – from cars to public transport
Discussion of targeted measures	• Increasing the distance from the pollutant source (i.e. by moving cars further from the pavement) is important. Children experience worse emissions than an adult as they are shorter and closer to the emission source.
Strategic measures – preliminary long list	• Implementation and regional expansion of the 'Auntie Duck' educational engagement programme — A flagship educational programme spearheaded by Sandwell, launched in 2024 • Contribute to the introduction of an accredited education scheme for schools (tied to PH4 – schools accreditation of WMCA framework) — Can build on the success of the Auntie Duck programme — Introduction of an accredited education scheme for secondary schools, Auntie Duck is focused on primary schools • School Streets (tied to PPG14 – school streets of WMCA framework) — Following pilot at Ferndale School, enforcement using cameras of the ‘School Streets’ initiative – temporary restriction on cars at pickup and drop off. Potential for expansion of locations? — Ferndale pilot ended up being a success in terms of road safety but not much difference was seen in terms of air quality as the road that was closed was a small, narrow cul-de-sac. • Promotion of active and sustainable travel in schools — e.g. walking and cycling to school. Bikeability - provision of bicycle skills /road safety teaching with primary school aged children • Partnership working with NHS health professionals including school nurses and asthma specialists — To ensure that air pollution actions are directly tied to public health outcomes • Partnership working on production and implementation of new Sandwell Cycling and Walking Infrastructure Plan to highlight opportunities for co-benefits and further leverage active travel campaigns — Cycling and walking infrastructure plan is due to be updated this year, therefore there appears to be scope to include opportunities for air quality to be involved in conversations about prioritisation. • Working towards the construction of new high quality cycle tracks and other cycle infrastructure in accord with West Midlands cycle network planning, including links between key developments and key services to promote mode shift from car.

Topic	Comments
	— Dedicated infrastructure is important for making people feel safe walking and cycling • Promotion of walking and cycling via awareness campaigns with schools, businesses and communities, showcasing new and existing cycle paths and walkways, production of local maps, advice on how residents can use green spaces for active travel/canal paths to reduce pollution exposure. • Partnership working with WMCA on the implementation of the West Midlands Air Quality Framework - open route for communication and co-ordination between communication teams at the WMCA and local authorities to effectively co-ordinate and deliver air quality communications including via their centralised regional air quality website. — This is important as consistency in messaging across the West Midlands is important • Pro-active implementation of the Smoke Control Order via engagement with relevant businesses and residents • To raise awareness among businesses, residents and landlords of specific air quality issues and potential solutions associated with the use of log burners (e.g. ensure the correct fuels are used), and indoor and outdoor burning. • Reduce fuel combustion by improving home energy efficiency / Support landlords and homeowners in accessing grants to retrofit / Support the transition from gas central heating. — Limited opportunity for local authority funding for this – collaboration with planners/climate – promotion of national schemes? • Pro-actively engage with permit holders to ensure compliance with the terms of their permits • Increase co-working with the Environment Agency to enforce A1 permits. • Consult on new planning applications for impact on local air quality — Continue to consider air quality issues for new planning applications in line with the agreed planning protocol • Provide air quality guidance to land/property developers prior to planning application submission • Use the planning process to restrict the installation of new solid fuel and promote the transition from gas central heating — For discussion with planners • Reduce parking for new developments where possible and, where local services are not available, ensure that transport needs are addressed and are improved in the local area. — For discussion with planners • Use damage cost contributions /S106 funding to effectively improve the environment, air quality and green infrastructure around new schemes. — More flexible use of the money • Work with existing public health channels and healthcare professionals to deliver consistent, targeted messaging to vulnerable residents • Work with trusted community advisors to deliver AQ messaging — e.g. Project working with Faith Centres across Sandwell to reduce local air pollution by encouraging behavioural change using low-cost air quality monitors and a web based AQ dashboard and AQ toolkit • Bus Lane Enforcement — More cameras to enforce bus lanes – to improve reliability of buses and make them a more attractive option. Any further information? • Continuing upgrade of Sandwell's vehicle fleet to zero or low-emission vehicles • Sufficient assessment/integration transport plans into AQ — For discussion? Transport hubs – not just roads • Creation of a taxi hire / private hire emissions policy

Topic	Comments
	— Licencing Officer raises issue of Wolverhampton licencing – something to incentivise? • Work with the highways team on Street Trees to understand the provision and replacement of trees along highways. — Need to understand whether this is reported upon/measurable • Maintenance of the existing Air Quality council website to provide information on air quality matters • A Clean Air Zone for Sandwell — This has been previously tabled and not taken forward previously. — There are likely to be significant barriers to implementation, and it is unlikely that national funding would be available. • Traffic management to improve air quality (speed limits? LTNs?)
Discussion of strategic measures – preliminary long list	• Ferndale was piloted as a school street with volunteers; Sandwell is now in a position to do camera enforcement for future school streets which would be more robust and less labour intensive. • Once people have invested in a car, they can be reluctant to use active travel/cycling/public transport as they see it as “paying twice”. Important to shift the mindset that we’re trying to get people to stop using cars for very short journeys and either walk or cycle for these journeys and use the car for longer journeys when its more feasible. Or that a train could be more cost effective. Important to highlight that it’s a “rather” than an “either or”. • It’s about getting people to use the transport options available to them in the most efficient and cost-effective way for them. — Important to work out what people’s current choices are and why. May not just be cost, but also time based or based on safety, for example school children on buses. • More controversial measures may be needed to really produce modal shift. To really reduce cars, LTNs are required, or changes in speed and school streets. It’s necessary to physically reduce the amount of space for driving and make it quicker to cycle to places rather than to drive.
Results of polls	• Most favoured strategic measures — School streets — Promotion of active and sustainable travel in schools — Auntie Duck education programme — Traffic management measures to improve air quality and adjusting speed limits and low traffic neighbourhoods — Accredited education scheme for schools • Least favourite strategic measures — Engaging with permit holders — Clean Air Zone for Sandwell — Creation of a taxi hire and private hire emissions policy — Continuing upgrade of Sandwell MBC’s fleet — Reduce parking for new developments where possible

E3 Steering Group Meeting 3

Meeting Name	Subject	Attendees
Steering Group Meeting 3	Sandwell Air Quality Action Plan Steering Group Meeting 3	Andy Thorpe (Sandwell Council), Becky Wilson (Sandwell Council), Cerys O’Shea (Transport for West Midlands), David Gallagher (Transport for West Midlands), Duncan Urquhart (AECOM), Ed Wicks

Meeting Date	Time	
2 June 2025	10:00 – 12:00	(Living Streets), Elizabeth Stephens (Sandwell Council), Elle Winning (West Midlands Combined Authority), Fiona Gee (Sandwell Council), Francesca Silcocks (Sandwell and West Birmingham Hospitals NHS Trust), Hayley Insley (Sandwell Council), Howard Ford (NHS Black Country ICB), Jake Thrush (Transport for West Midlands), Jenny Chidley (Sandwell Council), Luke Hadlow (Black Country Transport), Margaret Gardiner (Sandwell Council), Nicky Egan (AECOM), Paul Meadows (Sandwell Council), Phil Kingston (Sandwell Council), Shane Middleton (Sandwell Council), Sharon Lang (Sandwell Council), Stephen Brown (British Cycling), Suzy Street-Hall (Sandwell Council), Tina Okewale (Sandwell Council)

Agenda

- Introductions
- Birmingham Road, Oldbury update
- Midland Metropolitan University Hospital
- Shortlisting process and three key actions
- Short list of measures
- Open discussion
- Any other business
- Next steps

Actions Summary

Action	Assigned to
Meeting minutes to be written and circulated	Izzy Reeves & Elizabeth Stephens
Sharing information from a presentation about school streets from Derby City Council	Jake Thrush
Finish first draft of AQAP	Nichola Egan & Izzy Reeves

Minutes

Topic	Comments
Birmingham Road, Oldbury	• Previously it was understood this was the one remaining area of non-compliance in Sandwell as the concentration calculated at the closest receptors (houses on Birmingham Road) was 39.8 µg/m^3 in 2023. • However, there was a mistake in calculating the correction to account for the distance between the monitoring site and the closest houses to the road • Therefore, concentrations were actually lower than originally thought in 2022 and 2023 and so the AQMA has been compliant in 2022 and 2023, and it looks likely to be compliant again in 2024.

Topic	Comments
	• Defra advises that revocation of an AQMA can be considered following three years of compliance. For Sandwell, it has been agreed with Defra that the AQMA will remain in place for another two years and revoke it after five years of compliance. • Once the AQMA has been revoked, an AQAP is no longer required and will be replaced with an Air Quality Strategy.
Midland Metropolitan University Hospital	• This is a specific area of concern partly due to the new Hospital opening and the ongoing major redevelopment in the area. • A large number of relatively small developments are going ahead or are planned to go ahead, individually these would not be an issue but combining the potential cumulative effects and the revocation of the AQMA (which currently triggers more stringent criteria for carrying out an air quality assessment), there is a reasonable risk that it could lead to significant impacts. • This is almost a case study in identifying an area of potential concern due to current or future issues. • We want to lean into actions which relate to planning policy and planning guidance to ensure that Sandwell has the tools to recognise and mitigate potential impacts before they become an issue. • Need to ensure that everything is appraised effectively individually, but that cumulative overlap of impacts is also considered.
Short listing process	• Four aspects considered — Feasibility of carrying out the action, i.e. is there likely to be public support, or internal support, available funding sources. — Air quality impact, i.e. how large an impact could this measure have on concentrations of pollutants on a local basis, but also regionally. — Co-benefits, i.e. are there also benefits for public health, active travel, climate, economic impacts, potential social impacts. — High level assessment of cost, is the measure likely to cost less than £10,000, less than £100,000 or more than £100,000. • Air quality was double rated compared to feasibility or co-benefits as this is the aim of the AQAP. • Each aspect scored from 1 to 3, where 1 is low and 3 is high.
Key actions	• Three actions considered key actions. These are considered the most impactful actions and targeted. • **School Streets (score 24, cost <£100,000, timescale is unknown, owner is Sandwell Highways Team)** — *Action – early engagement with Highways to ensure School Streets are implemented in the most beneficial way – in consultation with highways, planning, education and school representatives to ensure implementation is robust and evidence-based.* — *School Streets may achieve a 2% reduction in annual mean concentrations (but this is targeted at the times children are most likely to be exposed) and a 18% of parents reporting that they drive to school less often.* — There is existing funding from the Department for Transport that the Sandwell Highways team are looking to implement. — This will be happening; therefore, the feasibility is high. — This has a large impact on air quality as it has potential to touch upon many of our priority areas – health of children, active travel, public travel – by reducing overall traffic and idling near schools and disrupt overall journeys to incentivise non-car use, while also making roads safer in these specific locations. — Heavily linked to active travel as when the ability for parents to park at certain areas, it leads to the potential for them to rethink the journey to

Topic	Comments
	school and whether they could walk, cycle or take a bus instead. This may enhance opportunities to engage with stakeholders to increase access to walking and cycling as alternatives to private car travel. • **Active Travel Planning (score 20, cost <£100,000, timescale is 2025, owner is Sandwell Pollution Control Team)** — *Action – increasing active travel uptake can be best achieved through Sandwell Council's commitment to maintaining a dedicated Active Travel Officer who is responsible for engaging with schools and businesses to develop sustainable commuting strategies, with progress being recorded and recognised through the Modeshift STARS platform.* — Workplace and school travel plans must be prioritised to achieve improvements associated with active travel and lower pollution levels as they promote walking, cycling and public transport as viable alternatives to car use — Active travel delivers social, environmental, and health benefits while supporting national and local transport policies. It aligns with the National Planning Policy Framework, Local Cycling and Walking Infrastructure Plans and Sandwell Council's transport and environmental strategies. — Active travel plays an important role in reducing traffic congestion and improving air quality in an urban area like Sandwell. — Pushing forward with the work that's currently being done through the Modeshift STARS platform on active travel planning, especially in schools. — Benefits of targeting schools is ensuring young children consider active travel instead of just cars. — Goal is for 75% of schools to have an active travel plan by 2030. This is not a goal of 100% as there are existing difficulties in terms of engagement with schools so 100% is considered unrealistic. — Large crossover with the School Streets action. — Responsibilities and reporting may be quantified to evidence the extent and magnitude of benefits that are achieved, and to identify risks and opportunities to enhance the outcomes. • **Produce Supplementary Planning Document for Air Quality (score 22, cost <£100,000, timescale is 2027, owner is Sandwell Pollution Control Team & Sandwell Planning Team)** — *Action – the development and outline of an SPD that recognises the specific concerns and opportunities in Sandwell Council as reflected in the Local Plan and ensure there are no gaps or ambiguity in the development planning process.* — WMCA are developing an overarching document to support development planning across the region, it is important that Sandwell understands and influences the regional position. — The SPD should specifically state the ambition of Sandwell Council to reduce emissions and achieve the best possible local air quality that prioritises reducing exposure for the most deprived and disengaged social groups. — Specific items to include may be: • Continuous improvement in air quality, going beyond compliance with current limits, i.e. once the AQMA is revoked. • Use the planning process to restrict the installation of new solid fuel and promote transition from gas central heating. • Reduce parking for new developments where possible and, where local services are not available, ensure that transport needs are addressed and improved in the local area.

Topic	Comments
	• The requirement for mitigation, and requirement and potential uses for damage costs. — The aim of the SPD is to ensure that new developments are appropriately assessed for air quality, even when there is no remaining air quality management area.
Discussion of key actions	• **School Streets** — Feedback from the trail at Ferndale Primary School was that compliance wasn't very good. Initially the school were putting barriers out to prevent motorists from getting into the cul-de-sac but quickly the school realised they didn't have the resources to do that every day. • The restrictions were in place from 8:15 – 9:00 and 14:45 – 15:30 permanently throughout the 18-month trial period as other trials across the country said not to make the timings too long. — Other schools that were initially in discussion about school streets were worried about putting barriers out as they didn't want to cause conflict with parents — From December 2024, Sandwell Council were granted powers to enforce moving traffic contraventions including school streets. — Therefore, now portable cameras can be put up to ensure enforcement and avoid the school having conflict with parents. — Each school needs to be assessed individually as school streets may not be suitable for all schools based on diversion routes etc. — Consideration will be given to residents on school streets with permits, encouraging teachers to arrive before the 45-minute window and making provision for children with disabilities who needed to drive to the school within those 45 minutes. — Schools may be less resistant now as it will be done through proper enforcement, so parents won't complain to the school. — The aim is to push people to start walking, and not just park on the next street over. — School streets enforced with cameras have been really effective in Derby. — 20 – 25 schools have signed up to a scheme called Eco Stars which has nine key objectives including healthy living and transport. These schools could be considered as the next phase of roll out as they have already put themselves forward as having a commitment towards climate change and have transport as a key objective. — There is a link to the school travel plans put together by Suzy. • **Active Travel Planning** — Currently there are 16 schools signed off for approved travel plans already. — Its important for the Active Travel Officer post to be made permanent as there is a lot of ongoing work for schools to do with the Modeshift STARS platform, so the post needs to be sustained to ensure this work doesn't disappear and the schools are supported. — Guidance for new schools includes cycle parking but can't ask all schools to retrofit as no funding source. — There are grants available to lots of schools, if they are supported to access this funding. — The Active Travel Officer can share information on grants or funding and sign post and support schools in finding this information. • **Produce Supplementary Planning Document for Air Quality** — WMCA are in the process of looking at developing an air quality planning guidance document, the format of this document is TBC partly as they don't have any statutory planning requirements. They want to

Topic	Comments
	ensure they develop something that all local authorities could go on and adopt themselves. — There is a planner from Sandwell set in the WMCA task group so this will keep the communication going. — The purpose of this document will be to plug a gap and ensure there are no potential gaps particularly after the revocation of the AQMA
Other short-listed actions – Planning	**• CIL/S106 (score 16, cost <£100,000, timescale is unknown, owner is unknown)** — Use of the Community Infrastructure Levy or Section 106 funding which is where money has been assigned due to the environmental costs of a project. — How can we properly raise those levies and how can we properly use those funds for the benefits more widely. **• Planning application support and review (score 18, cost <£100,000, timescale is 2025, owner is Sandwell Pollution Control Team & Sandwell Planning Team)** — Enforcement of the SPD or the current situation before the SPD whereby air quality specialists, through the planning team, will be providing pre application advice on developments and also reviewing actual planning applications too. — Ongoing at the moment and will also carry forward after the adoption of the new local plan and the planned adoption of the SPD
Discussion of other short-listed actions – Planning	— There's a policy which is being considered to require health impact assessments for developments, considering eight or nine criteria. This would require a guidance document of some sort – potentially a checklist approach at pre-application. This has potential to be tied in to the proposed SPD for air quality.
Other short-listed actions – Children	**• Accredited education scheme for schools (score 18, cost <£100,000, timescale is unknown, owner is Sandwell Pollution Control Team and West Midlands Combined Authority)** — Contribute to the introduction of an accredited education scheme for schools. Highly feasible as it's a WMCA measure. This complements the existing Auntie Duck programme. — This is for all schools, not just primary schools. — Sandwell can take a lead with the experience from Auntie Duck. **• Auntie Duck (score 18, cost <£100,000, timescale is 2025, owner is Sandwell Pollution Control Team)** — Implementation and regional expansion of the Auntie Duck educational engagement programme. Unlikely to achieve a significant, direct air quality impact, but it's a significant public engagement tool with a good response from existing investment. — Aim is to roll out Auntie Duck to all primary schools by end of 2030.
Discussion of other short-listed actions – Children	**• Accredited education scheme for schools** — Programme aligned to the national curriculum which can be utilised by local authorities. **• Auntie Duck** — Theres a lot of overlap between Auntie Duck and road safety and school streets. — Funding to get a mascot costume made. — Aim is for Auntie Duck to be the face of air pollution for Sandwell.
Other short-listed actions – Active Travel	**• Active travel promotion (score 20, cost <£100,000, timescale is 2025, owner is Sandwell Pollution Control Team)**

Topic	Comments
	— Promotion of walking and cycling via awareness campaigns with schools, businesses and communities, showcasing new and existing cycle paths and walkways, production of local maps and advice on how residents can use green space for active travel/canal paths to reduce pollution exposure. — Minimal direct benefit, but essential enabling measure to complement other measures. — Likely to include an annual awareness campaign. — This will closely benefit from the continued employment of an active travel officer. **• Investment in new cycle infrastructure (score 9, cost >£100,000, timescale is unknown, owner is unknown)** — Working towards construction of new high quality cycle tracks and other cycle infrastructure in accordance with West Midlands cycle network planning. — Contribute to modal shift, may also enable increasing distance between receptors and emissions to reduce exposure. — Optioneering study/SOBC is underway for implementing a cycle lane and associated road layout changes between Oldbury to Galton Bridge Station (Cycle Route 6) along Birmingham Road where the BP monitoring site is located.
Discussion of other short-listed actions – Active Travel	**• Active travel promotion** — Sandwell Stride – weekly walks that have taken place for last 25 years or more, nothing stopping this being done for cycling. — If you can get people cycling for leisure first, they may think about using it for commuting and utility purposes afterwards.
Other short-listed actions – Engagement and Education	**• Maintenance of the existing Air Quality council website to provide information on air quality matters (score 24, cost <£10,000, timescale is 2025, owner is Sandwell Pollution Control Team)** — Website already exists and increasingly used as a primary source of information for residents to engage with local authority. **• Work with trusted community advisors to deliver air quality messaging (score 16, cost <£100,000, timescale is unknown, owner is unknown)** — Builds on successful work carried out with faith groups across Sandwell. — Public engagement and support is vital for successful intervention. It's the role of early engagement to build reassurance and trust within the wider community and encourage individual awareness and responsibility to support community ownership of proposed measures which may be perceived as restrictions, e.g. school streets, whilst also ensuring that valid concerns and risks are properly recognised and adopted at early design stages. **• Targeted public engagement (score 18, cost <£100,000, timescale is unknown, owner is Sandwell Pollution Control Team)** — More general engagement on air quality, health and education with respect to air quality is also likely to be vital for the success of other measures. — For example, for school streets, for the parents who feel inconvenienced, how are we going to bring them round and let them know that the air quality outcomes are good for their health and their kids and how important it is. **• Health Partnership (score 18, cost <£100,000, timescale is 2025, owner is Sandwell Pollution Control Team & NHS)** — Partnership working with NHS health professionals including school nurses and asthma specialists.

Topic	Comments
	— Partnership already in place but the exact nature of partnership may evolve. — Implementation may include pollution alerts, education etc. — Benefits likely to be primarily to human health rather than air quality unless there is a behaviour change element, but this is still important.
Other short-listed actions – Fleet Technology and Behaviour	• **Traffic management, e.g. speed restriction (score 11, cost >£100,000, timescale is 2025, owner is unknown)** — Desk study for All Saints Way indicates potential benefits but acknowledges it may not be suitable in all locations. Study shows a 10-mph reduction would achieve a small reduction of roadside NO_2 concentrations between 0.1 – 0.6 µg/m^3 — Speed reductions not always associated with air quality improvements because emissions follow a U-shaped curve, so emissions are very high at very slow speeds and very high at very fast speeds. — Start stop behaviour is a key factor for ai quality impacts. — The reduction on All Saints Way improved air quality not only because of the speed, but also because of the smoothing out of the start stop accelerating behaviour — Outcomes include encouraging active travel and benefits for road safety and climate. — Speed reductions planned for other roads in Sandwell – A457 Birmingham Road, A456 Hagley Road West, A4041 Queslett Road and Londonderry Road and Londonderry Lane • **Council zero-emission fleet (score 16, cost <£100,000, timescale is unknown, owner is Sandwell Pollution Control Team)** — Continuing upgrade of Sandwell Council vehicle fleet to zero or low-emission vehicles — Costs unlikely to be significantly greater than organic fleet turnover — In line with central government mandate for the end of sales of ICE — Air quality impact will be small as council vehicles make up only a small part of the fleet but may be an important demonstration of leading by example. • **Taxi/licensed vehicle policy (score 14, cost <£100,000, timescale is unknown, owner is unknown)** — Small part of fleet breakdown but may be disproportionately significant due to their very high annual mileage (60 k -100 k per year) and tending to operate in urban areas with lower average speeds and congestion — Implementation should include engagement with neighbouring Districts (e.g. Wolverhampton) and WMCA due to cross-border movement within Black Country and if only Sandwell publishes a policy, will this push taxi drivers to simply register their vehicles elsewhere
Discussion of other short-listed actions – Fleet Behaviour and Technology	• **Traffic management, e.g. speed restriction** — There were concerns that the 20 mph speed limits in Wales would worsen air quality, but they found the opposite, in general, as on urban congested streets with a 30-mph speed limit, as soon as drivers have a chance they accelerate up to 30 mph, treating it as a “target”. And when the speed limit reduces to 20 mph, that acceleration is removed which often resulted in improving emissions. — Needs to be looked at on a case-by-case basis, looking at what the speed limit is currently and what the proposal is. — The area of potential greatest benefit is areas that are busy with rapid changes in speed, braking and accelerating. — The 20 mph speed restrictions in Wales have also led to a large drop off in the number of casualties, falling to the lowest numbers since

Topic	Comments
	records began, additionally, the average person saved £50 off their car insurance. • **Taxi/licensed vehicle policy** — This has been discussed across the West Midlands and the authorities couldn't all agree — Theres no point making a policy if it just results in taxis registering elsewhere while still operating in Sandwell and not actually improving their vehicle emission standards — For now, this measure is not feasible and should be moved to the "Measures not taken forward" section and removed from the short list
Other short-listed actions – $PM_{2.5}$, Smoke Control and Domestic Emissions	• **Solid fuel burning (score 15, cost <£100,000, timescale is unknown, owner is Sandwell Pollution Control Team)** — To raise awareness among businesses, residents and landlords of specific air quality issues and potential solutions associated with the use of log burners and indoor and outdoor burning. — Sits alongside the smoke control area work but with a wider remit (e.g. including outdoor burning) — Likely to primarily affect PM pollution, much less so for NO_2 • **Smoke control (score 18, cost <£100,000, timescale is 2025, owner is Sandwell Pollution Control Team)** — Pro-active implementation of the Smoke Control Order via engagement with relevant businesses and residents. — Implementation of the existing Council service — Likely to primarily affect PM pollution, much less so for NO_2
Discussion of other short-listed actions – $PM_{2.5}$, Smoke Control and Domestic Emissions	• **Solid fuel burning** — Including bonfires — Domestic emissions are primarily PM rather than NO_X — Gas boilers are a large source of NO_X
Other short-listed actions – Regional Collaboration	• **Partnership with WMCA on implementation of the West Midlands Air Quality Framework (score 16, cost <£100,000, timescale is 2025, owner is Sandwell Pollution Control Team and West Midlands Combined Authority)** — Sandwell is a part of the wider Black Country and WMCA region, which is recognised by the WMCA Air Quality Planning Guidance Task and Finish Group. — Transboundary pollutants and cross-border travel contribute to the air quality across the whole region and cannot be managed independently at a strategic level. Therefore, cooperation and coordination of actions, measures and adoption/development of policy and guidance will achieve much greater benefit — Primarily enables wider cooperation and benefits rather than being a stand-alone action. Open route for communication and coordination between teams at the WMCA and local authorities to effectively coordinate and deliver air quality communications. • **Local transport plan (score 16, cost <£100,000, timescale is unknown, owner is unknown)** — Oversight and stakeholder engagement by Pollution Control Team could ensure co-benefits to air quality are realised — Opportunity to understand how traffic growth and mode shift are being implemented at a strategic level to ensure consistency with the AQAP
Other short-listed actions –	• **Industrial permitting (score 16, cost <£100,000, timescale is unknown, owner is Sandwell Pollution Control Team)**

Topic	Comments
Permitted Installations	— Pro-actively engaging with permit holders to ensure compliance with terms of their permits for part B permits. — Sandwell have a team in place to facilitate this but have a relatively small number of permits. • **A1 permitting (score 16, cost <£100,000, timescale is unknown, owner is Sandwell Pollution Control Team)** — Increase co-working with the Environment Agency to enforce A1 permits. — Sandwell have a team in place to facilitate this but have a relatively small number of permits.
Measures not taken forward	• **Low traffic neighbourhoods** — Expensive and likely to lack in public support. — Traffic restriction is already being implemented in key areas at key times through School Streets. • **Clean air zone** — Very expensive and very little public support expected. — No mechanism to win national government funding due to current compliance. • **Home energy efficiency/insulation** — Domestic emissions are not a large source of emissions, unless specifically targeted to houses with solid fuel burning. • **Green infrastructure** — Not viable as uncertain what mechanism would have been used to ensure that the plantings would be beneficial to air quality. • **Bus lane enforcement** — Unlikely to have any air quality impact, therefore not correct avenue for implementation. — May help buses move more effectively throughout the network which may encourage more use of public transport. • **Cycling and walking infrastructure plan** — Plans are expected to be adopted imminently therefore we cannot influence this.
Discussion of measures not taken forward	• **Low traffic neighbourhoods** — Transport planning team are researching into this, but nothing planned yet. • **Green infrastructure** — If you put trees in the wrong place, it may worsen air quality
Discussion of next steps	• **Annual meetings of the Steering Group during AQAP implementation** — It's recommended that the steering group stays in touch throughout the implementation stage too to ensure things are going to plan, see if the situation has changed, ensure that things are progressing in right direction. — Annual or 6 monthly meetings proposed — There's a lot of overlap between what different teams are doing so the steering group is a good way of connecting and making the work more efficient and effective • **AECOM are writing up everything that has been discussed into the Defra template so the AQAP can be submitted to Defra and go to consultation** — This document will also be circulated around the steering group.

Glossary of Terms

Abbreviation	Description
ANPR	Automatic Number Plate Recognition
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'
AQF	Air Quality Framework
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 Objectives
AQS	Air Quality Strategy
ASR	Air quality Annual Status Report
BEV	Battery Electric Vehicle
CAZ	Clean Air Zone
CIL	Community Infrastructure Levy
CRSTS	City Region Sustainable Transport Settlements
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
EFT	Emissions Factor Toolkit
HGV	Heavy Goods Vehicles
ICE	Internal Combustion Engine
IMD	Indices of Multiple Deprivation
LAQM	Local Air Quality Management
LAQM.TG22	Local Air Quality Management Technical Guidance 2022
LA	Local Authority
LCWIP	Local Cycling & Walking Infrastructure Plan
LGV	Light Goods Vehicles

Abbreviation	Description
LSOA	Lower Super Output Area
LTN	Low Traffic Neighbourhood
NHS	National Health Service
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NPPF	National Planning Policy Framework
NTEM	National Trip End Model
OEP	Office for Environmental Protection
ORCS	On-Street Residential Charge point Scheme
OZEV	Office for Zero Emission Vehicles
O_3	Ozone
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
S106	Section 106
SCWIP	Sandwell Cycling & Walking Infrastructure Plan
SMOTS	Sustainable Modes of Travel Strategy for Schools in Sandwell
SO_2	Sulphur Dioxide
SPD	Supplementary Planning Document
TEMPro	Trip End Model Presentation Programme
TRO	Traffic Regulation Order
ULEV	Ultra-Low Emission Vehicle
WHO	World Health Organization
WMCA	West Midlands Combined Authority
ZEV	Zero Emission Vehicle

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