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2024 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995
Local Air Quality Management, as amended by the
Environment Act 2021

Date: June 2025

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- The ASR has been reviewed by UKHSA North West

This ASR has been signed off by a Director of Public Health.

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Executive Summary: Air Quality in Our Area

Air Quality in Greater Manchester

Greater Manchester (GM) is committed to making our city region a greener place for all, where people live well. We are fully aware of the adverse effects of air pollution and the impact on our communities. This report demonstrates the work being carried out across the region to continuously improve air quality and deliver better health outcomes for all.

Breathing in polluted air affects our health and costs the NHS and our society billions of pounds each year. Air pollution is recognised as a contributing factor in the onset of heart disease and cancer, and can cause a range of health impacts, including effects on lung function, exacerbation of asthma, increased hospital admissions and mortality.

Air pollution can affect all of us and particularly impacts the most vulnerable in society: children, the elderly, and those with existing heart and lung conditions. Low-income communities are also disproportionately impacted by poor air quality, exacerbating health and social inequalities.

GM has a population of nearly three million people, across 10 local authorities and covers an area of approximately 500 square miles. The city region contains high-density urban areas, suburbs, semi-rural and rural locations, with strong regional centres in Manchester, Salford Quays and Trafford Park. The principal pollutants of concern within GM are those mainly associated with traffic, nitrogen dioxide (NO₂) and particulate matter (PM), at locations near busy roads where people live, study, work or shop. However, other sources also contribute to the overall air pollution burden for example combustion, domestic activities, industry, agriculture and natural sources.

Table ES 0-1 provides a brief explanation of the key pollutants relevant to Local Air Quality Management and the kind of activities they might arise from. Air Quality Objectives are policy targets generally expressed as a maximum ambient concentration to be achieved, either without exception or with a permitted number of exceedances, within a specified timescale. The Objectives are set out in [Appendix E: Summary of Air Quality Objectives in England](#). Air pollutant concentrations are measured in terms of mass per unit volume. A concentration of 1 µg/m³ means that one cubic metre of air contains one microgram (10⁻⁶ grams) of pollutant.

Table ES 0-1 - Description of Key Pollutants

Pollutant	Description
Nitrogen dioxide (NO ₂)	Nitrogen dioxide is a gas which is generally emitted from high-temperature combustion processes such as road transport or energy generation.
Sulphur dioxide (SO ₂)	Sulphur dioxide (SO ₂) is a corrosive gas which is predominantly produced from the combustion of coal or crude oil.
Particulate matter (PM ₁₀ and PM _{2.5})	Particulate matter is everything in the air that is not a gas. Particles can come from natural sources such as pollen, as well as human made sources such as smoke from fires, emissions from industry and dust from tyres and brakes. PM₁₀ refers to particles under 10 micrometres. Fine particulate matter or PM_{2.5} are particles under 2.5 micrometres.

Air Quality Management Areas (AQMA) are declared where there is an exceedance, or likely exceedance, of an air quality objective. GM declared an AQMA in 2016 for exceedances of the annual mean NO₂ objective. It covers the trunk road network across GM and Manchester City Centre. Maps showing the locations of the AQMA are included in [Appendix D: Maps of Monitoring Locations and AQMAs](#) of this report or can be viewed via [this link to the Defra AQMA interactive map](#).

A joint Greater Manchester Annual Status Report (ASR) has been prepared to fulfil the combined local authorities' duties under the Environment Act 1995. It specifically reports on the air quality requirements of the Local Air Quality Management (LAQM) monitoring regime and progress against actions within the Greater Manchester Air Quality Action Plan (AQAP).

The AQMA is separate from the recently approved investment-led, non-charging Greater Manchester Clean Air Plan (CAP) to tackle roadside nitrogen dioxide exceedances. The GM CAP has its own monitoring regime with different reporting criteria to LAQM, as such, GM CAP monitoring results are included here for information but are reported separately. For LAQM, local authorities must pay due regard to Statutory Technical Guidance LAQM.TG22 when monitoring air quality to be representative of relevant public exposure, whereas CAP monitoring relates to roadside concentrations only.

Long-term trends in GM show an improvement in air quality for NO₂, PM₁₀ and PM_{2.5} and no exceedance of the SO₂ objective since ASR reporting began in 2015. Over the short-term, following the travel restrictions implemented during 2020 which dramatically reduced NO₂ levels, concentrations in GM increased as transport again became a contributing factor with more people moving around the city region. From 2023 and continuing in 2024, there has been an overall decrease in NO₂ concentrations compared to 2021-2022.

Travel in Greater Manchester has broadly returned to pre-pandemic levels since the final travel restrictions were lifted in 2022. There has however been a slight change in travel behaviour and how the transport network is used. Table ES 0-2 shows the percentage difference in total number of trips made using different modes of transport between 2024 and 2023 across GM. The figures include weekends, workdays, school holidays, bank holidays and the extra leap year day in 2024. As a general trend, weekday peak periods remain below pre-pandemic levels, possibly relating to the increase in hybrid/remote working. The biggest increases in trip numbers were seen across public transport.

Table ES 0-2 – Change in Travel Behaviour Between 2023 and 2024

Mode of transport	Increase in number of trips 2024 vs 2023
Metrolink	13% ⁽¹⁾
Rail	11% ⁽²⁾
Bus	5% ⁽¹⁾
Highways	1.6% ⁽³⁾

Notes:

- (1) Delivering the Bee Network Reports, viewable via [this link to the Bee Network Committee](#).
- (2) Estimates of GM station entry and exits 2022/2023 to 2023/24, from [ORR Data Portal](#).
- (3) [Estimates of vehicle miles travelled in England, 2024: Headline figures - GOV.UK](#).

Air quality monitoring across GM uses two approaches: continuous automatic systems for real-time data collection and monthly non-automatic (manual sampling) for more comprehensive analysis. Using both methods allows a more complete understanding of air pollution.

With regards to the LAQM results in 2024, four exceedances of the NO₂ annual mean objective were recorded across GM at non-automatic locations (diffusion tubes), a decrease of eight on the previous year. Oxford Street (MA29ANO) in Manchester recorded the highest concentration of 51.3 µg/m³, when distance corrected for exposure, the concentration was 46.8 µg/m³. This compares to 49.6 µg/m³ and a distance corrected value of 43.4 µg/m³ in 2023.

GM CAP monitoring data showed 38 locations where exceedances of the NO₂ annual mean limit value in GM were indicated (down from 64 in 2023), with a further 73 locations considered to be at risk of exceeding the limit (down from 78 in 2023). The GM CAP monitoring data indicates that air pollution has generally decreased compared with 2023. There are now five districts Bolton, Bury, Rochdale, Salford and Trafford with no exceedances of the legal limit for nitrogen dioxide.

Across the 24 automatic monitoring sites for both LAQM and CAP, two exceedances were recorded, Manchester Oxford Road (LAQM) at 44.2 µg/m³ and Manchester Bridge Street (CAP) at 51.9 µg/m³. The NO₂ concentration at Oxford Road increased from 41 µg/m³ and Bridge Street reduced from 54 µg/m³ in 2023. It is accepted that there was a slight increase at Oxford Road, further investigations are taking place to understand why.

In relation to LAQM monitoring locations the number of exceedances of the NO₂ legal limit between 2019 and 2024 are shown in

Table ES 0-3. In 2024, there were four NO₂ exceedances recorded at non-automatic locations and one at an automatic monitoring site. For 2023, the exceedances were 12 and 1 respectively, and for 2019 (pre-pandemic) there were 59 exceedances at non-automatic monitoring locations and 3 at automatic locations. The downward trend in exceedances of the NO₂ annual mean limit value demonstrates the commitment GM has made to improving the region's air quality and reflects the continued investment in community action, public transport and vehicle upgrades to ensure NO₂ levels are reducing year on year.

Table ES 0-3 - LAQM Exceedances of the annual limit for NO₂ at non-automatic and automatic sites between 2019 and 2024

Year	Non-Automatic Site Exceedances	Automatic Site Exceedances	Total Location Exceedances ⁽¹⁾
2019	59	3	59
2020	2	0	2
2021	13	1	13
2022	16	1	16
2023	12	1	12
2024	4	1	4

Note: (1) Diffusion tubes are co-located at automatic sites; to avoid double counting, the total number of exceedance locations is represented by the non-automatic sites.

Actions to Improve Air Quality

Whilst air quality has improved significantly in recent decades, there are some areas where local action is needed to protect people and the environment from the effects of air pollution.

The Environmental Improvement Plan¹ sets out actions that will drive continued improvements to air quality and to meet the new national interim and long-term targets for fine particulate matter (PM_{2.5}), the pollutant most harmful to human health. The Air Quality Strategy² provides more information on local authorities' responsibilities to work towards these new targets and reduce fine particulate matter in their areas.

The Road to Zero³ details the government's approach to reduce exhaust emissions from road transport through several mechanisms, in balance with the needs of the local community. This is extremely important given that cars are the most popular mode of personal travel, and most Air Quality Management Areas are designated due to elevated concentrations heavily influenced by transport emissions. The 10 GM local authorities continue to introduce measures to address air pollution and work within the GM AQAP, as well as implementing the investment-led Clean Air Plan.

The 2016 AQMA for NO₂ covers areas across GM modelled to have an annual mean concentration greater than 35 µg/m³. An AQAP was also produced following consultations and workshops with key stakeholders, including the GM local authorities, UK Health Security Agency (formerly Public Health England), Transport for Greater Manchester and National highways (formally Highways England), to gain feedback on the measures proposed in the plan.

The action plan has seven headline areas, broken down into 39 specific actions to improve air quality:

- **Development management and planning regulation:** Includes standardising regulation and policy across the GM region.
- **Freight and HGVs:** Opportunities to reduce emissions associated with the movement of freight and goods by road.

¹ Defra. Environmental Improvement Plan 2023, January 2023

² Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

³ DfT. The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy, July 2018

- **Buses:** Buses are a crucial part of the transport network, carrying by far the most public transport passengers, and give opportunities to improve air quality. New legislative developments, adoption of the GM Bus Strategy and improvements to vehicle standards will ensure that bus continues to play a vital role into the future.
- **Cycling:** Existing strategies and initiatives encourage cycling.
- **Travel choices:** Encouraging the public and businesses to make sustainable travel choices is essential in realising lasting air quality benefits.
- **Cars:** Measures to reduce emissions from cars and reduce the number of vehicle trips can deliver real air quality improvements.
- **Information and resources:** Educating and informing the public, businesses and policy makers is vital in bringing air quality improvements.

Active Travel

During 2024, further investment in active travel is enabling a more sustainable and safer future, with many projects and schemes completed across the region. All GM local authorities have benefitted from developments enabling more people to leave the car at home. Some highlights from the past year are shown below, further information is available on each local authority website with details on their own active travel schemes.

In Bolton, the Gladstone Road/Bolton Road junction redevelopment delivered new segregated walking and cycling infrastructure prioritising active travel at a busy junction, not present before, and links to the Farnworth 'Streets for All' scheme, Figure 0-1.



Figure 0-1 - Gladstone Road/Bolton Road Junction Redevelopment

Manchester saw the completion of the Chorlton Cycleway, providing a 5 km route between Chorlton and the city centre. The scheme provides protected, segregated cycle infrastructure and improved pedestrian facilities, including several protected junctions along its length, Figure 0-2. Additional schemes delivered throughout 2024 include active neighbourhood measures, junction improvements and removal of on-street parking.



Figure 0-2 – Computer Drawing of an Active Travel Junction on the Chorlton to Manchester Cycleway

In Oldham, ambitious plans to transform the town centre to make it easier, safer and more enjoyable to walk, wheel or cycle continue. This has included improving the route between the town centre and bus station, the West Street western connection to the town centre and the Rock Street eastern connection to the town centre, Figure 0-3.

These ongoing changes have made the street environment more attractive and vibrant, with new seating and cycle parking, planting trees and creating high-quality outdoor event spaces which have been well used over the last year in a busy town centre events programme.



Figure 0-3 - Segregated Cycling Lane on West St, Oldham

In Rochdale, several schemes have been completed, such as a pedestrian crossing upgrade at Bury Road/Sandy Lane. This was a signalised junction for motor traffic on a busy section of the network with no dedicated crossing facilities, the upgrade introduced four controlled crossing points at the junction. At St Leonards Street in Middleton, a Prohibition of Driving Traffic Regulation Order was approved which led to the route being closed for vehicular through traffic, the road space being built up to footway level and the space offered to active travel. A Bee Network crossing scheme was delivered outside the largest primary school in the borough at Bowlee Primary School, Figure 0-4. Alongside the controlled crossing point, the scheme included new walking and cycling connections/renewed materials and, importantly, new restrictions on the highway outside the school to remove on street parking and declutter road space.



Figure 0-4 - Active Travel Infrastructure outside Bowlee Primary School on Windermere Road

In Stockport, the two-acre Viaduct Park on top of the new Stockport Interchange, includes segregated cycle and pedestrian facilities providing high quality and accessible connections to the railway station, interchange and town centre, avoiding the A6, Figure 0-5. In addition, new crossings and junctions were installed across the borough in 2024, redeveloping areas previously lacking good active travel provision.



Figure 0-5 - Active Travel Infrastructure integrated into the New Stockport Interchange

In Trafford, a highlight is the new safer crossing point delivered at the junction of Dunham Road and Gorsey Lane, following a campaign led by a local teenager. Three safer junctions on Talbot Road were launched in July 2024 which link into work that has begun replacing temporary coned cycle lanes along the A56 Chester Road to Talbot Road, Figure 0-6.



Figure 0-6 - Talbot Road/Chester Road Active Travel Infrastructure

Across GM, schemes started in 2023 continued to grow in 2024. These include home to school travel, where Modeshift STARS and Youth Travel Ambassadors gained additional schools to the programmes, promoting more sustainable ways for children to travel to school. Further information can be found through [this link to the Bee Active Supporting the school run webpage](#).

Bikeability, the Department for Transport's (DfT's) flagship national cycle training programme for schoolchildren in England, continues across the 10 local authorities in GM. 2023-24 saw a 25% increase in delivery of the course compared to 2022-23. The life skills that this course provides will ensure children across the region feel more confident when riding their bike and, with the ongoing schemes to promote active travel, they will hopefully consider this as their primary mode of choice for some journeys.

Bike Hire

GM's Starling Bank Bike hire scheme is part of the Bee Network's vision for a fully integrated, London-style public transport network that helps more people to walk, wheel and cycle around the city region. The scheme is operated by Beryl, an experienced bike share company, with Starling Bank becoming the first sponsor in January 2024.

Ridership continues to grow with more than 107,000 people registered to use the bikes so far, including 35,000 new users joining in 2024. Bike hire users have reached one million rides and collectively pedalled 2,783,000 km since the scheme launched in November 2021, equivalent of travelling around the world 62.5 times.

Starling Bank Bikes play a key role in boosting access to cycling in GM, with bikes now available to hire in Manchester, Salford and Trafford. With the scheme going from strength-to-strength, TfGM will be adding 300 new e-cycles to the fleet over the coming months.

Starling Bank Bikes are available to hire from one of the Starling stations and unlocked via the scheme's app, Figure 0-7. Pushbikes cost 50p to unlock and 5p per-minute to ride while e-cycles cost £1 to unlock and 10p per-minute.



Figure 0-7 - Greater Manchester's Starling Bank Bike Hire docking stations

The bike hire scheme contributes to ongoing efforts to improve air quality and decarbonise GM's public transport network by enabling people who either do not own a bike or do not have it with them to opt for pedal power. Riders who switch from car to cycling can decrease their carbon footprint by up to 83.7%, figure from this [link to Beryl Impact Report 2023](#).

Long-term proposals for bike hire in GM will grow the fleet to 8000 bikes covering areas of each borough where high demand is projected. The expansion will provide more people with easy and affordable access to thousands more bikes and support integration of cycle hire services into Bee Network ticketing, enabling people to use them for the 'first or last mile' of their journey when using bus or tram.

Information on the Starling Bank Bike hire scheme can be found via this [link to the Bee Active cycle hire webpage](#).

Bus

Tranche 2 of the Bee Network Franchise programme was launched in March 2024, where Rochdale, Oldham, Bury, Salford and areas of north Manchester followed on from Wigan and Bolton, Figure 0-8.



Figure 0-8 - Bee Network branded buses at Oldham Bus Station

Franchising has been a huge success with reports showing Bee Network bus services are more reliable than pre-franchising and outperform services elsewhere in GM, figures from [this link to the Bus punctuality webpage](#). Between the 1 January and the 19 March, 74.30% of Bee Network buses were on time, compared to 67.62% of commercial services and 62.75% for the same period prior to franchising.

The number of people using Bee Network services has also increased. Between the 5 and 18 November, average weekday patronage on Bee Network buses was 131,095, this grew to 138,010 between 3 and 16 March (a 5.27% increase). A Bee Network high of 141,720 was seen on the 6 March, with more than 17 million journeys so far.

Since launching in September 2023, passengers have benefitted from new zero exhaust emission buses. At the end of December 2024, 114 (11.7%) franchised buses were zero exhaust emission. The GM Bus Strategy aims for the full electrification of Greater Manchester's bus fleet (and supporting infrastructure) by 2032, with 50% to be zero exhaust emission by 2027. In his May 2024 Mayoral election manifesto, Greater Manchester Mayor Andy Burnham said he wanted to bring the date of for an all-electric bus fleet forward to 2030.

Data for the first 50 vehicles in service shows they have travelled 925,000 miles, equating to an in-use saving of roughly 1,000 tonnes of CO₂e. Assuming the replacement of Euro VI engines and a conversion factor of 0.14 g NO₂/km, this could have prevented up to 208 kg of NO₂ during use.

Around a quarter (27%) of people in the Greater Manchester Residents Survey ([Link to March 2024 report](#)) said a lack of night-time public transport prevented them accessing opportunities for work, night classes, socialising or late-night healthcare services. In response to this in September 2024, a year on from the first franchised services in GM, a trial 24/7 night bus was introduced, Figure 0-9.

The V1 and 36 services connect Manchester with Leigh and Bolton via Salford, and will run at least hourly, 24-hours a day, seven days a week and on most bank holidays, Figure 0-10. The routes were chosen due to their proximity to key night-time economy sites, such as hotels, bars and clubs, hospitals and distribution centres, and serve areas with higher numbers of people less likely to own a car and rely on public transport.

The year-long trial will provide 24-hour connectivity for around 135,000 people living within a five-minute walk of the two routes, including students and people working in the hospitality, healthcare and logistics sectors. The routes also connect with taxi ranks, Starling Bank Bikes and e-scooter stations, supporting options for onward travel.

Both routes serve areas which were among the first to be taken over by the Bee Network in September 2023, and whose buses are now under local control for the first time in nearly 40 years. Night buses have the same capped bus fares, first introduced in 2022,

to provide a simplified ticket offer consistent across all bus services in Greater Manchester.



Figure 0-9 – Andy Burnham, Mayor of Greater Manchester, launching the Night Bus

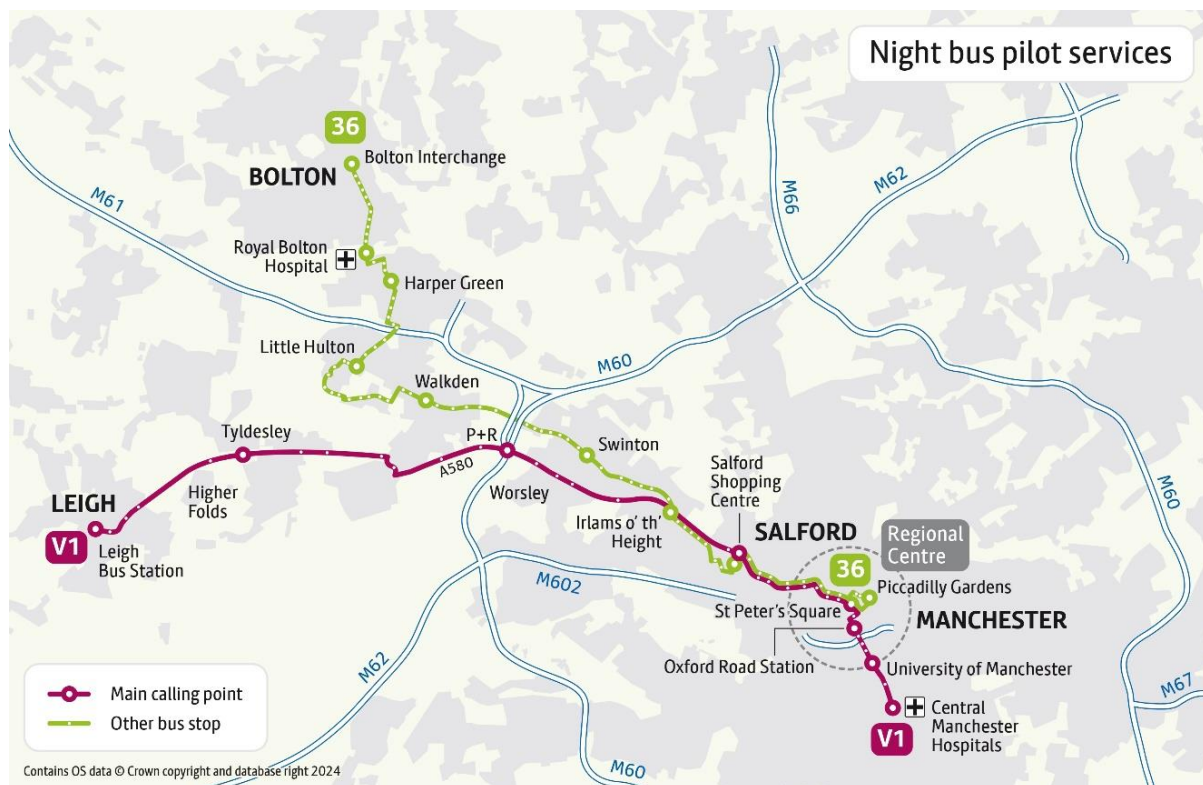


Figure 0-10 - Route map of the V1 & 36 bus routes

Safety of passengers and staff onboard night bus services is vitally important to the success of the trial, and TravelSafe Support and Enforcement Officers (TSEOs) deployed to provide extra reassurance and visibility on these services. TSEOs have

patrolled Bee Network buses and interchanges since the launch of the first Bee Network franchised services in September 2023. All night buses are equipped with CCTV, and drivers are in regular communication with both the operational control room and TfGM's 24/7 control centre.

As part of the pilot, TfGM is partnering with Strut Safe, a volunteer-operated support line offering people a friendly voice to keep them company when walking between a bus and their front door. More information can be found on the [Strut Safe website](#).

Another new bus service provides a direct service from Wigan to Middlebrook Retail Park in Horwich, Bolton. It was introduced in 2024 following requests from residents and Bee Network users wanting a direct link to the popular leisure facility.

The Bee Network

2024 Review

- **Bus Franchising** – GM delivered Tranche 2 of the Bee Network in spring 2024. Franchising will provide more convenient services to leverage modal shift, improve service quality, and develop a fully zero exhaust emission fleet.
- **Bike Hire** – The Starling Bike Hire scheme continues to gain popularity, expanding further in 2024, which has led to ridership surpassing one million, a fantastic achievement which shows GM's commitment to making sustainable travel choices.
- **Active Travel** - New bike libraries have continued to open across GM, enabling people who do not own a bike to cycle. A scheme offering people the chance to try out or loan an e-cycle launched in autumn 2024. The scheme will also include a pilot e-cycle purchase subsidy option. This follows on from a pilot delivered by Cycling UK. TfGM continues to offer a range of ongoing cycle skills and confidence training for those who live or work within the region. In 2023-24 over 1,500 people attended these courses.

GM utilised funding from dedicated pots to facilitate the growth of active travel schemes across the region. The ongoing work is embraced by the community, Network Principles Surveys in 2023 and 2024 reported half of respondents agreed Greater Manchester's transport network encourages them to walk or cycle as part of their trips, a significant increase from 38% in 2023.

- **Tram** – In spring 2024, a pilot scheme was launched for taking regular push bikes onto trams. This is part of making the GM transport network more inclusive and promote active travel.

Further work continues to develop the network, with new stop viability assessments linking new developments to existing neighbourhoods, with business cases being developed in 2025.

- **Infrastructure Projects** – Stockport Interchange was completed in spring 2024, Figure 0-11. The long-awaited redevelopment of this area saw a state-of-the-art interchange constructed in the heart of the town centre. Not only does the facility provide a seamless transition for passengers connecting to longer journeys, but the building also has a new greenspace called ‘Viaduct Park’ located around the top of the development, Figure 0-12. The Interchange has been designed with future Metrolink integration in mind and TfGM is continuing to work with Stockport Council to develop proposals to bring trams to the town.



Figure 0-11 - Stockport Interchange viewed from Swaine Street



Figure 0-12 - Stockport Interchange Ariel View (Image Courtesy of Stockport Council)

Other Bee Network areas in development, include work on delivering Golborne Station in Wigan. After a public consultation in January 2024, 90% of respondents supported the scheme, aiding the submission of a planning application towards the end of 2024. During 2025, a final business case will hopefully be submitted to government.

Additional Bee Network journey improvements undertaken during 2024 include:

- Installing bus lanes and bus only sections of road.
- Making bus stops safer and more accessible with improved shelters, seating, lighting, CCTV and level boarding.
- Making it easier to walk, wheel or cycle to a bus stop or get from a bus to a train or tram stop with better pedestrian and cyclist crossings and footpaths.
- Making journeys quicker and more reliable with bus priority at and on the approach to junctions and traffic light priority for late running buses.

Looking Forward

Franchising of bus services has been key to the success of the Bee Network. Attention now turns toward the local railway network to deliver GM's ambition of creating a "World Class" inclusive and sustainable transport network.

In 2024, £20m of funding was approved by the Bee Network Committee (BNC) for key transport infrastructure projects within GM to support:

- **Integrated Ticketing & Travel Information** – £7.3m was approved to deliver contactless pay-as-you go across bus and Metrolink. Customers can pay via contactless card or device on Bee Network bus and tram services, with the best value fare automatically worked out and capped. Funding will help crack down on fare evasion and enhance the Bee Network App.
- **Middleton ‘Streets for All’** – The Rochdale Council scheme, subject to approval, will ensure high-quality walking, wheeling and cycling connections for Middleton town centre. It supports the wider Masterplan and ambition to unlock regeneration around Market Place, creating new housing and establish a new cultural quarter. A key feature will involve reconfiguring the Market Place roundabout, to include new public space, segregated cycling provision around the roundabout and improve the underpass to allow shared walking, wheeling and cycling space. BNC approved £0.7m for a final business case and awarding a contract for Streets for All.
- **Improving Journeys Scheme** – Improving bus routes is a Bee Network priority. A long-term project is underway to improve reliability between Rochdale, Oldham and Ashton, with better connections to and from stops and environment improvements along key routes. The Rochdale-Oldham-Ashton route is the busiest on the franchised network. Funding for the ‘Improving journeys – Rochdale-Oldham-Ashton’ project is being released in phases, and BNC has released £2.1m of City Region Sustainable Transport Settlement (CRSTS) funding to develop the Rochdale element to full business case. Construction of the main scheme in Rochdale is anticipated to commence in autumn 2025, subject to approval.
- **Active Travel Schemes** – BNC approved funding for four active travel schemes with £10.46m from the Mayor’s Challenge Fund (MCF) and partly CRSTS funded. This will enable the delivery of almost 5 km of Bee Network standard routes, crossings and junction improvements. £4.99m was approved for cycling and walking infrastructure along Seymour Grove in Trafford, part of a wider programme of work that forms Trafford’s A56 North Active Travel Corridor between Stretford and Manchester city centre. BNC also approved £2.17m to build a new cycleway in Leigh, along on the A572 St Helens Road from the Bridgewater Canal to Bonnywell Road. It will improve the route from Leigh to Leigh Sports Village and Pennington Flash. £1.99m of MCF funding will develop a traffic-free active travel route from Wigan town centre to Standish, bypassing the busy A49, and £1.31m will extend the Whelley Loop Line to build an accessible ramp up to Hall Lane, improving access to Haigh Hall.

Defra Air Quality Grant

Air Quality Grant funding, awarded by Defra in 2022, has continued to be used to inform residents about the health impacts of wood-burning stoves, along with safer ways of burning solid fuel. In 2024, TfGM coordinated a third GM-wide information campaign, on behalf of the 10 GM local authorities, to raise awareness of the harmful effects to human health and pollution emitted from solid fuel burning, with a particular focus on woodburning stoves. An example Burn Better campaign asset is shown in Figure 0-13 – GM Burn Better Winter 2024/25 Campaign Asset.



Figure 0-13 – GM Burn Better Winter 2024/25 Campaign Asset

The winter 2024/25 Burn Better GM campaign aimed to:

- Raise awareness of the health impacts of air pollution from domestic solid fuel burning.
- Raise awareness of 'Ready to Burn' resources and how to 'burn better.'
- Raise awareness of smoke control areas.
- Change behaviour to reduce the number of households burning solid or incorrect fuel.

The campaign resulted in more than 13.4 million impacts/impressions through paid media and organic social media. The Burn Better GM Campaign appeared on BBC North West as part of a package around the impact of wood burning on health and included interviews with Clean Air Lead Cllr Eamonn O'Brien and Director of Public Health, Jilla Burgess-Allen. Email newsletters were used to reach public sector workers with over

12,500 recipients. Social media generated nearly 350,000 impressions using the #BurnBetterGM tag, and over 80,000 leaflets were distributed to homes in areas where more than 200 registered log burners were installed. The Burn Better website recorded more than 9000 page views during the campaign, a 189% increase on the previous year. Further details on our work to reduce particulate matter from domestic burning are provided in Section 2.3.

Clean Air Plan Update

Although this report covers 2024 it is important to note that, in January 2025 the government accepted the assessment that an investment-led, non-charging Greater Manchester Clean Air Plan will achieve compliance with nitrogen dioxide levels on the local road network in the shortest possible time, and Greater Manchester will not need to implement a charging Clean Air Zone.

Direction specifies that in terms of the GM Clean Air Plan the measures approved are as detailed in the appraisal report ('Evidence Submission for a new GM Clean Air Plan' dated October 2024) and its supplement. This includes a package of non-charging measures, specifically:

- Cleaner buses; provision of Euro VI buses, zero exhaust emission buses, charging infrastructure and associated support.
- Local traffic management measures at:
 - A57 Regent Road
 - A34 Quay Street/Great Bridgewater Street
- Support for moving the hackney carriage fleet to cleaner vehicles.

More information can be found on the Clean Air Plan website:

<http://www.cleanairgm.com>.

Conclusions and Priorities

During 2024, air quality continued to improve across GM. Only four LAQM locations recorded exceedances of the nitrogen dioxide air quality objective in 2024 (MA29ANO, MA84NO [triplicate site], OL21SRNO and WI245NO – all in AQMA).

GM local authorities carry out NO₂ monitoring using:

- **Continuous automatic monitoring:** 24 continuous air quality monitoring stations, 3 of which are CAP specific sites, 15 are located at the roadside.
- **Non-automatic monitoring (Diffusion tubes):** 342 LAQM monitoring locations, and 270 monitoring locations for the GM CAP.

Full details of the LAQM sites, as well as data for 2024, can be found in [Appendix A: Monitoring Results](#). Maps showing the location of the LAQM monitoring sites are provided in [Appendix D: Maps of Monitoring Locations and AQMAS](#) and via [this link to the Clean Air GM Data Hub](#).

The number of non-automatic sites exceeding the annual mean for NO₂ reduced by eight (from 12 to 4), compared to 2023. One exceedance for automatic monitoring, was recorded at Manchester Oxford Road, the same site as 2023.

Manchester Bridge Street (CAP automatic monitoring location) also measured an exceedance of the annual NO₂ limit at 51.9 µg/m³. However, it is not part of LAQM monitoring and there is no relevant exposure nearby. The diffusion tube site installed 53m from the monitoring station on Bridge Street (for GM CAP) measured 37.6 µg/m³ (14.3 µg/m³ less than the monitoring station), indicating that this may be a localised issue.

Table ES 0-4 summarises NO₂ concentrations and LAQM annual air quality objective (AQO) exceedances for automatic and non-automatic locations across GM for 2024.

Table ES 0-4 - Summary of LAQM NO₂ monitoring in GM in 2024

Authority	Automatic sites (with valid data capture) ⁽¹⁾	Non-automatic sites (locations) ⁽²⁾	Concentration range (all sites) (µg/m ³)	Exceedances of NO ₂ Annual Mean (non-automatic sites)		Increase / Decrease of Exceedances on Year
				In AQMA	Outside AQMA	
Bolton MBC	1	54 (49)	31.6 - 9.1	-	-	-1
Bury MBC	3	22 (20)	36.4 - 16.7	-	-	-
Manchester CC	3	33 (27)	51.3 - 13.9	2	-	0
Oldham MBC	1	32 (30)	41.3 - 13.3	1	-	-1
Rochdale MBC	1	29 (27)	35.0 - 9.4	-	-	-
Salford CC	3	53 (45)	38.9 - 9.7	-	-	-2
Stockport MBC	2	34 (29)	32.6 - 5.9	-	-	-
Tameside MBC	2	55 (53)	38.4 - 8.5	-	-	-3
Trafford MBC	3	21 (14)	25.4 - 9.5	-	-	-
Wigan MBC	2	50 (48)	40.7 - 13.4	1	-	-1
Total	21	383 (342)	51.3 - 5.9	4	0	-8

Notes:

(1) >25% (3 months or more) data capture.

(2) Number in brackets is total locations in district - accounts for duplicate/triplicate sites.

2024 NO₂ trends for GM LAQM sites can be summarised as follows:

- The highest automatic site annual mean concentration recorded was 44.2 µg/m³ at Oxford Road. This is an increase from 41 µg/m³ in 2023 at the same site and the same concentration as recorded in 2021.
- No other increases were recorded in the automatic site network. The majority of which continue to show decreases in NO₂ concentrations over the past five years.
- No exceedances of the NO₂ 1-hour mean objective were observed (more than 18 exceedances of an hourly concentration of >200 µg/m³). Nor was there an exceedance of this objective in 2021-2023.
- The highest diffusion tube annual mean concentration was 51.3 µg/m³ at Manchester Oxford Street (MA29ANO) inside the AQMA. When adjusted for relevant exposure the annual mean concentration at this location was 46.8 µg/m³.
- Four diffusion tube sites exceeded the AQO for NO₂ (40 µg/m³), a reduction of eight since 2023, and a significant improvement on 62 exceedances in 2019.

- 324 LAQM diffusion tube locations operating across both 2024 and 2023 with valid data were available for comparison. 280 of which recorded decreased annual mean NO₂ concentrations of up to 8 µg/m³ (range 0.5 – 8 µg/m³), 29 remained constant or changed by less than 0.5 µg/m³ (range -0.4 – 0.4 µg/m³), and 15 recorded annual mean concentration increases in the range 0.5 - 3.4 µg/m³.
- Of the monitoring locations operational in 2020 (the pandemic year), in 2024, 212 recorded concentrations less than or equal to 2020, 22 had slight increases (≤ 1 µg/m³), and 29 increased in the range 1 – 12 µg/m³. The greatest was 12.3 µg/m³ at Manchester Oxford Road.

For the 20 PM₁₀ automatic monitoring stations, two recorded slight increases compared to 2023 (Manchester Oxford Road and Tameside Mottram Moor). The remainder either remained constant or showed a slight fall in PM₁₀ concentration. The greatest decrease was Salford M60, which recorded 17 µg/m³, down from 19 µg/m³ in 2023. As per last year, there were no recorded exceedances of the annual mean objective (40 µg/m³) for PM₁₀.

All 10 automatic monitoring stations recording PM_{2.5} showed similar annual mean concentrations to 2023, in the range 6.4-9.1 µg/m³. All monitoring stations were compliant with the national air quality objective for PM_{2.5} (20 µg/m³) in 2024, and below the 2040 target level of 10 µg/m³.

No exceedances of the annual NO₂ air quality objective were recorded at non-automatic sites located outside of the AQMA in 2024. Of those recorded in 2023:

1. W1180NO – Winwick Lane, Wigan: 39.1 µg/m³ (2024). This is a 3 µg/m³ reduction in annual mean NO₂ concentrations from 2023. Mitigation measures continue to be implemented through a local air quality action plan, including camera-enforced fines for southbound vehicles exceeding a 7.5-tonne weight limit. This site will be kept under review during the 2025 monitoring period as more location specific measures are introduced to reduce the concentration further.
2. SA86NO – Bury Old Road, Salford: 38.9 µg/m³, after distance correction this is 29.7 µg/m³ at the nearest relevant receptor (2024). In 2023, the annual mean NO₂ concentration was 43 µg/m³ (the distance corrected concentration was 32 µg/m³). Due to the proximity of the AQMA boundary and most sections of Bury Old Road in Salford being covered by the AQMA, the site will be kept under review during the 2025 monitoring period to ensure air quality objectives are maintained.

In accordance with LAQM.TG22, monitoring locations are considered to be still in scope until they have been below $36 \mu\text{g}/\text{m}^3$ for three consecutive years. 2024 saw a lower bias adjustment factor for Staffordshire Scientific Laboratories which will influence the reported NO_2 concentrations across Greater Manchester. The 2024 national bias factor of 0.82 is lower than the 0.86 average of the previous four years. It concurs with the local bias adjustment factor calculated for 2024; further information is in Appendix C: Diffusion Tube Bias Adjustment Factors. A 0.04 difference equates to $1.6 \mu\text{g}/\text{m}^3$ based on a $40 \mu\text{g}/\text{m}^3$ limit value. Applying a 0.86 bias factor to 2024 data gives seven exceedances, five fewer than the 12 exceedances in 2023 and provides reassurance that the general trend across the city region is of a reduction in NO_2 concentrations for LAQM. Maintaining compliance consistently below the legal limit will increase confidence that concentrations are falling.

Greater Manchester Clean Air Plan

In 2024, NO_2 air quality monitoring for the Greater Manchester Clean Air Plan was carried out at 270 locations (up from 248 in 2023), with 38 sites of exceedance (down from 64 in 2023). A further 73 locations were considered to be at risk of exceedance (down from 78 in 2023). The GM CAP results for 2024 are summarised in Table ES 0-5.

- CAP monitoring data for 2024 shows air pollution has continued to improve in GM compared to 2023 and is significantly lower than levels recorded pre-pandemic.
- Six years ago, air quality monitoring showed 129 locations of nitrogen dioxide exceedance. This has fallen to 38 sites across the city region.
- There are now five districts across the city region with no exceedances of the legal limit for nitrogen dioxide: Bolton, Bury, Rochdale, Salford and Trafford
- This latest air quality monitoring data continues a really encouraging trend and indicates that the steps Greater Manchester is taking to invest in cleaner buses through the Bee Network is helping clean up the air we all breathe.
- By taking back control of local buses, the city region is delivering cleaner, greener and more reliable services, with nearly 300 electric buses running across the Bee Network. Prior to bus franchising fewer than 2% of buses in GM were electric now, 17% of the fleet is zero exhaust emission. By the end of 2025/26, we expect a quarter of buses to be electric.
- 75% of Bee Network buses are compliant with Clean Air Standards, up from 9% in 2017.
- The Clean Air Plan will see further investment in zero exhaust emission buses, as well as funding for cleaner taxis and targeted traffic measures to reduce pollution.

- Our bus depots are being electrified as we work to deliver a fully electric fleet by 2030. Work is complete at Bolton and Oldham with a new fully electric depot at Ashton. Further upgrades are being made at Middleton and Hyde during 2025.
- The majority of NO₂ exceedances (31) are in the regional centre. At Oxford Street in Manchester city centre, monitoring shows high levels of NO₂ were recorded in 2024. When looking at this location, a mix of older buses were running before the completion of bus franchising. Since January 2025, early indications are that zero exhaust emission and cleaner buses now on the Oxford Road corridor are reducing NO₂ levels. We are working with Manchester City Council to consider additional monitoring at this location to further understand any other influences on air quality.

Table ES 0-5 - Summary of GM CAP NO₂ monitoring in 2024

Authority	Non-automatic sites (with valid data capture)	Concentration range (all sites) (µg/m ³)	Exceedances of NO ₂ Annual Mean Limit (non-automatic sites)
Bolton MBC	19	40.4 - 24.5	0
Bury MBC	24	39.7 – 21.9	0
Manchester CC	127	59.4 – 22.6	31
Oldham MBC	10	42.2 – 25.9	1
Rochdale MBC	6	36.2 – 25.7	0
Salford CC	32	39.3 – 26.2	0
Stockport MBC	23	47.9 – 26.0	3
Tameside MBC	19	41.3 – 18.6	2
Trafford MBC	4	29.7 – 26.7	0
Wigan MBC	6	41.8 – 27.0	1
Total	270	59.4 – 18.6	38

How to get Involved

Our air quality is improving thanks to the efforts of us all, but there is still more to do to make GM one of the best places in the world to grow up, get on and grow old. We can all act to improve our air quality, both outside and indoors. For tips and advice please visit [this link to the GM Clean Air website](#) or [this link to the GM Burn Better webpage](#). Small changes to our daily habits can make a big difference.

GM welcomes scrutiny and suggestions from residents, voluntary groups, business and public bodies about our air quality monitoring and work programmes. You can contact us directly via e-mail to info@cleanairgm.com or through your local council's Environmental Health Department.

Travel Choices

Driving to work may be the most convenient or only option, but it might not be the most sustainable. In the UK, cars and taxis contributed to around half of the air pollution, emitted from all transport sources in 2023.⁴

We want to take pressure off our roads, where possible, by reducing the number of cars in use. A surprising number of short journeys in GM made by car can be replaced by walking, cycling or wheeling as the first option. In 2023, 16% of car trips were less than 1 km, which is about 185 million car journeys by GM residents. For those able to do so, these trips could be walked in around 15 minutes or cycled in around four minutes and save an estimated 14.8 tonnes of nitrogen oxides (NO_x).⁵ NO_x are a group of air pollutants made up of nitric oxide (NO) and nitrogen dioxide (NO₂), generated from combustion activities or reactions in the atmosphere.

We can improve our air quality by changing how we travel for short journeys:

- **Walking and wheeling:** If you can, this would be a great idea. If not, is it possible for part of your journey? The best thing is that this choice is free and can benefit your physical and mental health. We are investing to improve GM's streets making them more inclusive, user friendly and safe – making it easier for all of us.
- **Cycling:** Is your workplace part of the [cycle to work scheme](#)? Employers can help you to buy a bicycle, tricycle, or cycle with four or more wheels through salary sacrifice, with tax and National Insurance benefits. We are supporting businesses and organisations to provide facilities and remove barriers to cycling, such as installing secure parking or showers. More information about cycling in GM, can be found by following [this link to the Bee Active website](#). Business support, can be found through [this link to the travel planning for employers Bee Network website](#).
- **Active Travel infrastructure:** Over 120 km of Bee Network infrastructure has been delivered since 2020, including protected cycling, walking and wheeling routes along major roads and protected junctions. Further schemes are in development to ensure all infrastructure meets Bee Network standards and enables more sustainable travel.
- **Public Transport:** The Bee Network is GM's vision for a joined up, tap and go, transport system making it easier to get around. To help with the cost of living the mayor has capped bus fares for adult single journeys at £2, children at £1, 1-day

⁴ <https://www.transportenvironment.org/te-united-kingdom/topics/cars>

⁵ Based on Euro 6 standard for a diesel engine of 0.08 g/km

adult travel at £5 and children at £2.50. The Bee Network will be a one-stop shop for all local journeys. Whether you catch the bus, tram, train or walk, cycle or wheel, it will be:

- Easier to get around, with joined up services.
- Great value, with capped fares and flexible tickets.
- Simple to plan, with easy-to-understand passenger information.
- Accessible and available to everyone.
- More reliable and more sustainable.

More than 50% of Greater Manchester's buses came under local control as part of the Bee Network in 2024, with the rest following in January 2025. TfGM works with operators to ensure Bee Network services support travel to work and to identify improvements.

Private Vehicles

If car or taxi are the only way to get about, there are ways to reduce the air quality impact:

- **Park & Ride:** GM has a large Park & Ride network so you can cut down on driving, then catch the bus, tram and train. Parking is always free with the right public transport ticket. Find out more with this [link to the Bee Network Park and Ride information](#), which has a map of all Park & Rides in the city region.
- **Car share:** If you and a colleague (or two) can share the commute, it is an easy way to take unnecessary car journeys off the road, and you could split the cost.
- **Consider going electric:** Going electric could help reduce emissions and save money on fuel and maintenance. GM has more than 1,000 charging points and we are working to deliver more publicly owned charging infrastructure. [Zap Map \(link in text\)](#) is a website to help find your nearest charging points. Find out more about going electric with this [link to the Greater Manchester Electric Travel website](#).
- **Get your vehicle serviced regularly:** Looking after your car and making sure simple things like tyre pressures are topped up will not only save you money in fuel but will also mean fewer harmful emissions.
- **Switch your engine off:** Not leaving engines running when stopped for 30 seconds or more can improve air quality and save you money. A City of London study found idling uses up to 10 g of fuel per minute, equating to NO₂ emissions of 44.1 µg/m³ if parked on a built-up street. That means idling can be a big contributor

to exceedances of the 40 µg/m³ NO₂ legal limit. On top of that, idling for 10 minutes a day could cost up to £50 a year in fuel.⁶

- **Driving style:** Reducing speed and driving in a way that lowers the need for hard cornering and braking can help reduce harmful particulate matter. According to Defra, PM_{2.5} from brake and tyre wear in 2023 was 27% higher and road abrasion 30% higher than 1990 levels. For PM₁₀, road abrasion and brake and tyre wear together made up 79% of the emissions from domestic transport in 2023.⁷
- **Agile working:** Hybrid/remote working could reduce the number of private vehicles on our that contribute to traffic and poor air quality.

Leisure Travel

When it comes to things to do, GM has something for everyone. We are making it easier to choose public transport and active travel to support our communities and help our environment. Everything you need to plan your journey is on [the Bee Network website](#) or by [downloading the Bee Network app](#).

- **Bus:** Information on the Bee Network and local bus services can be found using [this link to the Bee Network bus homepage](#). Check out routes, timetables and even track your bus to know when to head to the stop.
- **Cycle, walking and wheeling:** Getting around under your own steam is one of the best and cheapest ways to get around, it is great for health and the environment. For cycle routes in your area, check your local council website or [this link to the Bee Active website](#), it has all you need to get started from learning to ride, how to borrow, buy or hire a bike, maintenance and finding the best routes around GM.
- **Tram:** With 99 stops and a network of lines across Greater Manchester, the fully accessible Metrolink tram system is a key part of the Bee Network. Find everything you need to get around by tram with [this link to the Bee Network tram homepage](#).
- **Train:** Greater Manchester is investing in and integrating eight commuter rail lines, covering 64 stations, into the Bee Network in three phases, delivering major improvements to stations, services and passenger experience - including integrated capped fares across bus, tram and train. National Rail provides

⁶ Idling Action - Review of Emissions Data, TRL Ltd., <https://www.trl.co.uk/uploads/trl/documents/PPR987-TRL-Idling-Analysis-Summary.pdf> (Accessed 15 April 2025) and a diesel price of £1.45/L

⁷ <https://www.gov.uk/government/statistics/transport-and-environment-statistics-2024/domestic-air-pollution-emissions-from-transport-in-2022>

information for long distance journeys ([Link to National Rail website](#)) and money saving offers for choosing rail travel ([Link to Rail Days Out Guide](#)).

For more about public transport in GM click [this link to the Bee Network Journey Planner](#).

Domestic Burning

Burning solid fuels and gas, both indoors and outside, can cause emissions of nitrogen dioxide and particulate matter. There are ways to reduce your exposure and help to improve air quality at home:

- When cooking with gas use the extractor or, including when burning candles and incense, opening a window can help to improve indoor air quality.
- Instead of bonfires, composting or your Council's garden waste collection service (where available) could be a better option.

If using a solid-fuel burner or stove at home, there are things you can do to ensure it is working as efficiently as possible. It could mean you burn less and save money, without affecting the heat output:

- Install a Carbon Monoxide detector.
- Burn only dry, seasoned wood. Avoid burning plastics, treated waste or wet wood.
- Check for the 'Ready to Burn' logo on packaging, [link to Ready to Burn website](#).



- Store wood in a dry, well-ventilated area.
- Sweep your chimney annually. A professional sweep can give advice on using your appliance better.
- Speak with your stove manufacturer or installer for operating advice.
- If you have an older or inefficient stove or one that is too big, consider replacing it with a modern efficient model.

Remember it is important to heat your home appropriately to remain safe and healthy.

[This link to the GM Green City website](#) has information on Burn Better GM and advice on help available for heating bills or to improve your home insulation.

More information on our work to reduce fine particulate matter (PM_{2.5}) across GM is in Section 2.3 (PM_{2.5} – Local Authority Approach).

Clean Air GM Website

The Clean Air GM website, Figure 0-14, contains lots of information, advice, mythbusting and data on local air quality, the Clean Air Plan, and how you can play your part in reducing and avoiding air pollution, [link to the Clean Air GM website](#).

There is a dedicated section for schools with a free air quality toolkit, designed to support teachers and students in understanding and addressing air pollution. It combines curriculum-linked lesson plans and resources with the latest scientific understanding. These resources can be accessed by following [this link to the 'Schools toolkit' webpage](#).

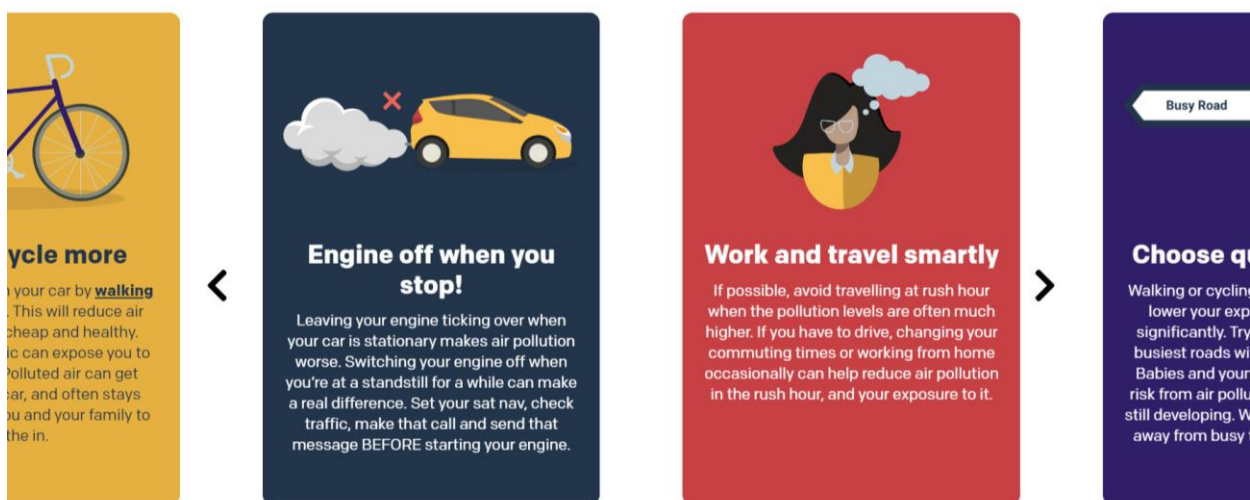


Figure 0-14 - Clean Air GM section on 'top tips' to avoid and reduce air pollution

AQ Alerts

GM offers a free pollution alert service via [this link to the Clean Air GM Forecast & Alerts webpage](#). In 2024, there were 717 users, an increase in subscribers for all districts over 2023. During 2025 we plan to promote the service more widely, taking advice from the Defra Air Quality Information System (AQIS) Review recommendations, to reach more residents who may benefit from them. The AQIS findings relating to the behavioural advice that accompanies the UK Daily Air Quality Index will be reviewed during 2025. Table ES 0-6 shows the number of pollution alerts and subscribers by authority for 2024.

Table ES 0-6 - Number of pollution alerts and subscribers by authority

Authority	Alert days (Moderate or Higher) in 2024	Comparison against 2023	Number of subscribers in December 2024	Change in subscribers
Bolton	8	-8	90	+13
Bury	12	-3	22	+3
Manchester	11	-4	326	+22
Oldham	13	-2	12	-1
Rochdale	12	-5	43	+2
Salford	10	-5	57	+3
Stockport	13	-2	53	+2
Tameside	13	-1	20	+2
Trafford	11	-4	43	+4
Wigan	10	-6	56	-1
Total	113	-40	722	+49

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1 Local Air Quality Management

This report provides an overview of air quality in GM during 2024. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995), as amended by the Environment Act (2021), and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area and prepare an Air Quality Action Plan setting out the measures it intends to put in place in order to achieve and maintain the objectives and the dates by which each measure will be carried out. This Annual Status Report is an annual requirement showing the strategies employed to improve air quality and any progress that has been made by GM.

The statutory air quality objectives applicable to LAQM in England are presented in Table E.1.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 18 months. The AQAP should specify how air quality targets will be achieved and maintained and provide dates by which measures will be carried out.

A summary of AQMAs declared by GM can be found in [Table 2-1](#). The table presents a description of the AQMA that is currently designated within Greater Manchester.

[Appendix D: Maps of Monitoring Locations and AQMAs](#) provides maps of the AQMA and the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designation are as follows:

- Nitrogen dioxide (NO₂) annual mean

As reported in last year's ASR GM, in agreement with Defra, delayed the review of the current AQMA and consequently the AQAP until the outcome of the new GM Clean Air Plan had been determined. In January 2025, the government approved GM's investment-led, non-charging Clean Air Plan (CAP). The CAP was introduced to address ongoing roadside exceedances of annual average limit values for NO₂ in response to a UK government issued mandate to bring levels within legal limits in the shortest possible time. More information about the CAP is available via [this link to the Clean Air Plan website](#).

In May 2025, Defra recognised that the requirements for LAQM and CAP are established under distinct and separate legal regimes. The reporting and assessment criteria for each differ, making it inappropriate to simply read across actions from the CAP to demonstrate projected compliance with the air quality objectives under the LAQM regime. Defra further acknowledged that it is necessary to understand how successful the CAP measures are in addressing compliance at all locations and agreed to extend the requirement for a revised AQAP, provisionally, until June 2027, at which point they will reassess whether compliance has been achieved or whether a revised AQAP is needed. A further update will be submitted to Defra on progress towards compliance, in June 2026.

Table 2-1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
AQMA Greater Manchester	Declared 01/05/2016	NO ₂ annual mean (40 µg/m ³)	An area covering the ten districts of Greater Manchester, including arterial routes, district centres and airport.	YES	58.7 ⁽¹⁾	46.8 ⁽²⁾	0	Greater Manchester Air Quality Action Plan 2016-2021 (16/12/2016)	https://cleanairgm.com/technical-documents/

Notes:

(1) Manchester Oxford Road, Distance corrected.

(2) Manchester Oxford Street, Distance corrected.

☒ Transport for Greater Manchester confirm the information on UK-Air regarding their AQMA(s) is up to date.☒ Transport for Greater Manchester confirm that all current AQAPs have been submitted to Defra.

2.2 Progress and Impact of Measures to address Air Quality in Greater Manchester

Defra's appraisal of last year's ASR concluded the report was well structured, detailed, and provides the information specified in the Guidance.

The GM authorities are grateful for the feedback received and have noted the following comments, which were provided to help inform future reports:

1. GMCA has provided a detailed list of action plan measures, with discussion split across its constituent councils and by individual measure. All relevant fields of Table 2.2 have been completed and progress against each measure is fully up to date. The Council has included many specific examples and additional metrics to measure progress. This level of detail is encouraged. However, as the AQAP was published in 2016 it is recommended that the Council update this to ensure all measures are still relevant. **[Addressed in Section 2.1]**
2. GMCA have provided detailed trends of NO₂ concentrations within the Borough over recent monitoring years which has been split into regions within the Borough for focused discussion of pollution levels and their effects. This is commended and this level of detail should be carried forward into future ASRs. **[Comment noted]**
3. Pictures have been included throughout the document which helps provide additional context and allows for easier understanding, which is encouraged. **[Comment noted]**
4. GMCA have shown clear commitment to improving air quality in their region through implementation of extensive travel schemes, i.e. cycle schemes and EVs, and development of a new Clean Air Plan and updates on its progress should be include in next year's ASR. **[Comment noted]**
5. GMCA have worked closely with other authorities to complete this ASR, which is welcomed. **[Comment noted]**
6. The Council have provided detailed ways for the local populace to engage in air quality improvement, including extensive travel schemes to encourage the public to use sustainable transport. The Council have also included the number of pollution alerts to help measure engagement, which is commended. **[Comment noted]**
7. GMCA have mentioned they will undertake indicative PM_{2.5} monitoring and publish the results in next year's ASR. This can be a useful tool to identify hotpots, respond to local resident's concern or track specific developments or actions; the

additional monitoring is welcomed. GMCA are reminded that, as these monitors are indicative, they cannot provide any conclusions against the air quality objectives. It is recommended that the details and results of monitoring from these sensors are included as separate appendices in future ASRs. **[Comment noted.**

Appendix report will be provided at project conclusion]

8. Monitoring Site WI180NO is currently located outside the AQMA and has reported exceedances for 5 consecutive years. The Council have reported that this site is 0 m from relevant exposure, as such the Council must review the boundaries of their AQMA to include this site or otherwise explain how the site is not relevant under LAQM guidance. **[Addressed in Conclusions and Priorities Section]**
9. It is recommended that GMCA include reference to the Public Health Outcomes Framework indicator for fractions of mortality attributable to PM_{2.5} emissions to provide additional context as to PM levels in the district. Similarly, the council could include reference to Defra background maps for additional context regarding background PM levels across GM. **[Addressed in relevant sections]**
10. Good QA/QC measures have been demonstrated, but it is recommended that GMCA include screenshots of the National Diffusion Tube Bias Adjustment Factors Spreadsheet to provide additional proof of calculation. GMCA should also consider using multiple local adjustment factors using their triplicate diffusion tubes co-located with automatic monitoring sites. **[Addressed in Appendix C]**
11. It is not known whether the councils followed the Diffusion Tube Deployment Calendar, this should be clearly stated in ASR. **[Addressed in Appendix C]**
12. The UK air website states GMCA AQMA is for NO₂ and PM₁₀, however the report indicates the AQMA is only relevant for annual mean NO₂. This should be amended to clarify the AQMA is no longer declared for PM₁₀. **[Amended]**
13. There are a few formatting issues within the tables of the report.
 - a. Table 2.2 has some highlighted measures without clear explanation for why this is. **[Comment noted]**
 - b. In Table A.2 some entries have been left blank and thus could do with clarification as to whether or not they are in the AQMA (e.g. OL484BNO), the height at which the monitoring site is located, and also a few diffusion tubes are missing coordinates i.e. TA48. **[Comment noted]**
 - c. In Table A.4, data capture for monitoring period should be used to identify data capture for tubes deployed mid-way through the year, i.e. WI245NO, and should not be marked as N/A. **[Comment noted]**

- d. Trafford Moss Park has been noted to monitor SO₂ but is not included in table A.9. If data is available for 2023, this should be reported. **[No SO₂ monitoring is undertaken at Trafford Moss Park]**
 - e. Entry W1245NO in Table C.3 has been duplicated. **[Comment noted]**
14. The maps have been clearly labelled for each monitoring sites, easily showing their locations, but scale bars and north arrows could also be added for additional context. **[Addressed in Appendix D]**
15. GMCA has stated that the highest annual mean concentration recorded was 49.6 µg/m³ at Manchester Oxford Street, which is inside the AQMA. When adjusted for relevant exposure the annual mean concentration at this location was 43.1 µg/m³. However, it should be noted that the highest concentration post distance correction was 43.4 µg/m³ at OL21SRNO, Shaw Road in Royton. **[Comment noted]**

GM has noted and actioned feedback and comments from the previous ASR submission and incorporated them into this report.

GM has taken forward a number of measures during the current reporting year of 2024 in pursuit of improving local air quality.

Details of all measures completed, in progress or planned are set out in Table 2-2. 39 measures are included, with the type of measure and the progress GM have made during the reporting year of 2024 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within the table.

More detail on these measures can be found in their respective Action Plans: the GM AQAP, the GM Clean Air Plan and GM Five-Year Environment Plan.

Key completed measures are:

- Bus franchising complete. GM buses are under public control as part of the Bee Network. This allows low-emission vehicles to target the highest need areas.
- Investment-led, non-charging Clean Air Plan agreed by government and implementation is underway.
- Domestic burning project. Research undertaken by University of Manchester into behaviours behind burning solid fuel informed development of communications and winter fuel awareness campaign, which ran across social media, print, radio and TV.

GM expects the following measures to be completed over the course of the next reporting year:

- Taxi and Private Hire. Discussions with taxi trade will include how to allocate an £8 million fund for drivers of Hackneys carriages, which formed part of the Clean Air Plan deal. GM will explore how private hire vehicles can be supported.
- The domestic burning project 2025/26 winter season information campaign.

GM's priorities for the coming year are:

- Review implementation of the Clean Air Plan.
- Review existing AQMA and Air Quality Action Plan.
- Bus Improvements. Targeted deployment of low emission/zero exhaust emission buses on key public transport corridors. Tap and go ticketing for bus and tram.
- Ongoing monitoring and analysis for the domestic burning project
- Awareness raising. Work with residents, vulnerable groups and hard to reach communities to raise awareness of air pollution and actions to improve air quality.
- Focusing on sites of exceedance and measures needed to bring about compliance.
- Partnership working with health colleagues and the voluntary sector to focus on managing the impact of air quality across GM's diverse communities.

GM worked to implement these measures in partnership with the following stakeholders during 2024:

- Neighbouring local authorities
- National Highways
- Joint Air Quality Unit (JAQU)
- Public Health Professionals
- UKHSA
- Local bus operators
- Schools
- Residents

The principal challenges and barriers to implementation that GM anticipates facing are:

- Long lead times in supply of electric buses and availability of charging infrastructure at existing bus depots.

Progress on the following measures has been slower than expected due to:

- Delays in gaining approval for the investment-led, non-charging Clean Air Plan.

GM anticipates that the measures stated above and in [Table 2-2](#) will achieve compliance in the GM AQMA for NO₂ by 2026.

The following section 2.2.1 details how GM and the 10 Local Authorities are working towards the Air Quality Action Plan 2016-2021 objectives. Although some may have been completed from an AQAP perspective, there is still ongoing work taking place to ensure GM is working towards improved air quality and becoming a sustainable region. The progress updates provided either address air quality improvements directly or as a co-benefit of other measures.

Some objectives require additional Local Authority reporting. Where this is the case, a narrative has been provided under the relevant Local Authority heading.

2.2.1 Progress on actions across Greater Manchester

2.2.1.1 Development Control and Planning Regulation

AQAP 1.1 - Construction Management Guidance

AQAP Action completed 2017.

AQAP 1.2 – Development Planning Guidance

AQAP Action completed 2017.

AQAP 1.3 – Cumulative Development Database

AQAP Action completed 2017.

AQAP 1.4 – Clean Air Zone Appraisal

This action is covered by the GM Clean Air Plan which is coordinated by TfGM in partnership with the 10 GM Local Authorities. Government agreed the Clean Air Plan in January 2025; updates are available via [this link to the Clean Air GM website](#). Six years ago, air quality monitoring data showed 129 locations of nitrogen dioxide exceedance. This has now fallen to 37 sites across the city region, down from 64 in 2023.

AQAP 1.5 – 20 mph Zones

Each local authority has provided their own update below.

AQAP 1.6 – Encouraging Travel Planning

GM works with employers to enable them to assess workforce travel habits and encourage uptake of more sustainable modes through direct engagement and free resources on TfGM's website. This year, TfGM re-launched its [business portal \(link in](#)

[text](#)) and simplified the employer travel planning tools to streamline the process for the users, shown in Figure 2-1. The updated portal has been shared with all local authority partners, business groups, through ongoing events and as part of a LinkedIn campaign.

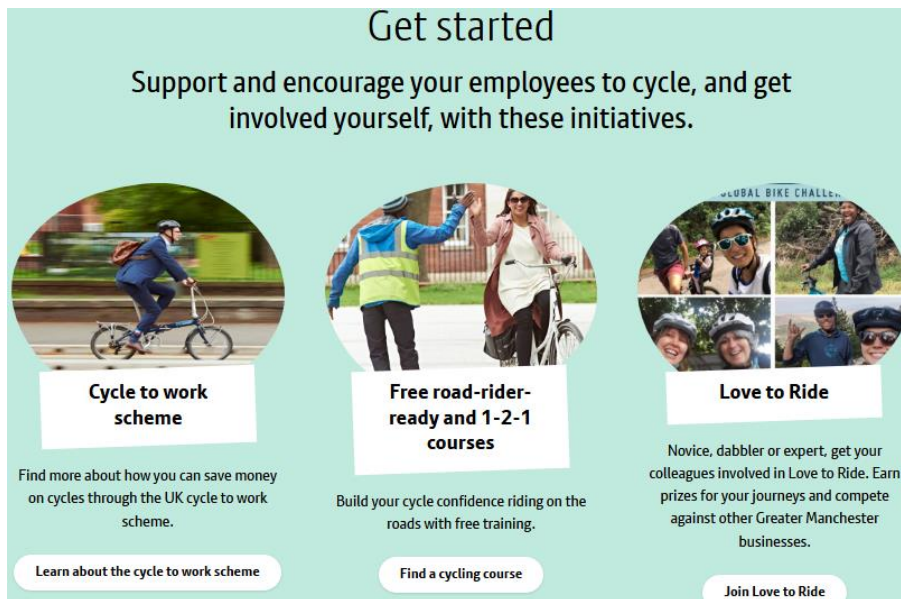


Figure 2-1 - The Walk, Wheel or Cycle to work page on the TfGM Business Portal for Employers

This year also saw the launch of new pilot night bus services on two routes in GM, allowing people to choose more sustainable travel at unsociable hours, Figure 2-2. An employer forum helped to develop the pilot, bringing insights and data to inform its planning.



Figure 2-2 - Launch of a Night Bus service on the Bee Network

AQAP 1.7 – Taxi & Private Hire Licensing

All GM authorities adopted an emissions standard, requiring licensed hackneys and Public Hire Vehicles (PHVs) to be a minimum of Euro VI (diesel) or Euro IV (petrol) by 31

December 2025. Some GM authorities adopted the emission standard on the expectation of Clean Air Plan funding to support the upgrade to compliant vehicles.

AQAP 1.8 – Green Infrastructure

Each local authority has provided their own update.

2.2.1.2 Freight and Heavy Goods Vehicles

AQAP 2.1 – TfGM Delivery and Servicing Plan (DSP) Toolkit

AQAP Action completed 2022.

AQAP 2.2 – Urban Distribution Centres

GM has worked with businesses/couriers to facilitate sustainable travel and e-cargo bike solutions in GM. Couriers have stated that GM's high-quality cycling network is a key reason they trial these products here. Amazon use e-cargo bikes out of the Trafford Park delivery hub, part of a five-year £300 million investment in electrifying and decarbonising their UK transportation network, and e-cargo bikes and walkers are expected to make more than two million deliveries a year. Amazon say these deliveries will replace traditional delivery vans, reduce city traffic congestion and improve air quality.

AQAP 2.3 – Urban Consolidation

Linked to AQAP 2.2. Plans will be set out in the forthcoming Local Transport Plan in relation to urban consolidation.

AQAP 2.4 – Access for Freight to Key Economic Centres and Sub-regional Freight Facilities

Refreshing the Greater Manchester Freight Strategy will provide guidance at a strategic, multi-modal level (relating to both potential and progress). TfGM are currently consulting with the 10 GM districts, and the resultant freight policy and strategic direction will be incorporated into the forthcoming GM Local Transport Plan.

AQAP 2.5 – Freight Information Channels

TfGM are a partner in CLOCS (Construction Logistics & Community Safety) and FORS (Freight Operator Recognition Scheme) to bring benefits to safety and the environment. We are reinvigorating the GM Freight Forum to bolster two-way engagement with the industry on environmental matters.

AQAP 2.6 – Diesel Transport Refrigeration Units (TRUs)

Action paused due to resource prioritising on other projects, however, focus on this has been included in the updated Greater Manchester 5 Year Environment Plan, launched in December 2024.

AQAP 2.7 – Engine Idling

Each local authority has provided their own update.

AQAP 2.8 – Alternative Fuels

TfGM provide information on electric vehicle (EV) travel options within the region, follow [this link to TfGM Electric Travel webpage](#). TfGM understands that changing to a new technology is not easy and can raise many questions. This resource was created by TfGM to give residents and businesses confidence in making an informed decision when switching to EVs, e-cycles and e-scooters, Figure 2-3. TfGM provides a comprehensive Electromobility report to the Bee Network Committee each autumn.

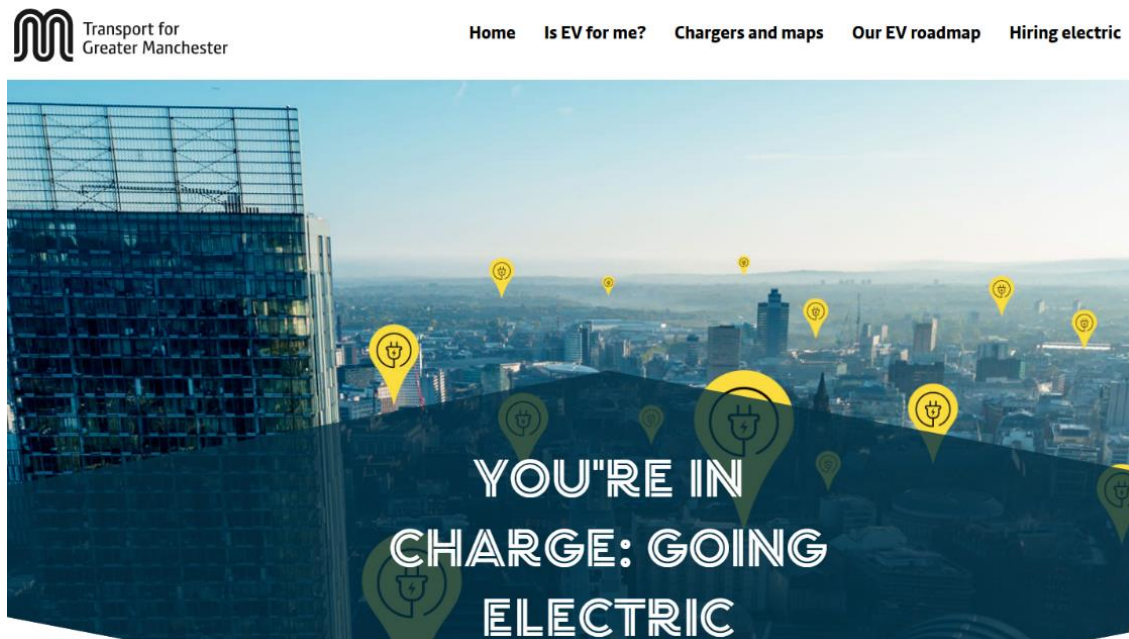


Figure 2-3 - The TfGM Electric Travel Homepage

The website has information on home chargers, energy tariffs and if there are government grants available to get them up and running. It also has interactive maps of charging locations and their availability. Another feature allows residents to request a charge point to be installed in their area; other users can then vote to support the location (Figure 2-4).

Local Electric Vehicle Infrastructure (LEVI) Scheme

Like many local authorities across the country, GM was awarded LEVI funding to facilitate EV growth within the region, thanks to the Office of Zero Emission Vehicles. This funding has specific criteria to provide infrastructure for on-street parking in areas that are not necessarily commercially viable. The project team at TfGM are continuing work with the 10 local authorities to deliver the project by procuring a Charge Point Operator to install the assets across the region. Updates will be provided in next year's ASR.

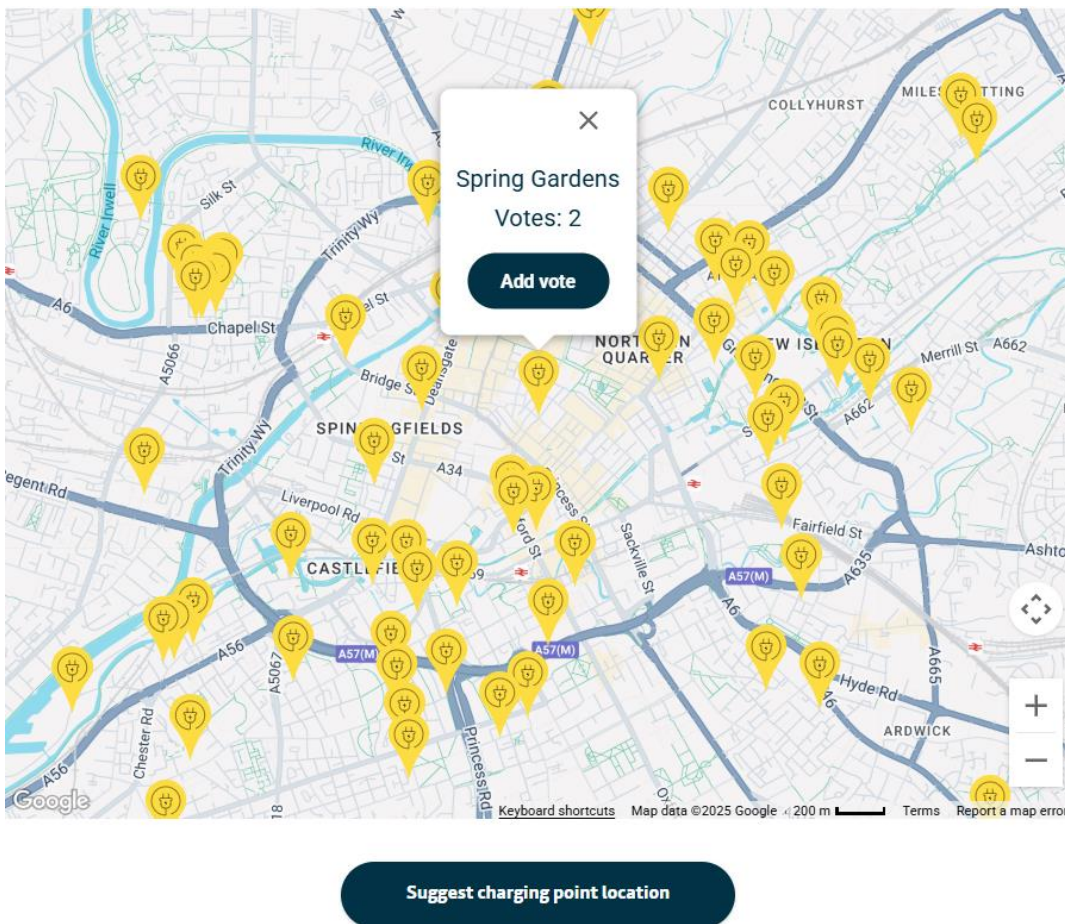


Figure 2-4 – Example of the Interactive Map for Residents Showing Suggestion for a New Charge Point Location

2.2.1.3 Buses

AQAP 3.1 – Bus Priority Programmes

Bus Infrastructure is a core element of the £219m City Region Sustainable Transport Settlement (CRSTS) investment programme currently being progressed with local authority partners. The programme includes:

- ‘Improving Journeys’ corridor schemes, improving bus routes between key destinations in GM.
- ‘Bus Pinch Points and Maintenance,’ improving performance of GM bus routes.
- ‘Bus stop improvements,’ improving the quality of our bus stops.

Several schemes have been delivered through this programme, while the remainder is progressing to business case development.

AQAP 3.2 – Bus Improvements

First trial diesel bus retrofitted to zero exhaust emission complete (link to [Bee Network accelerates towards a greener future with first electric bus conversion](#)). Performance monitoring will begin in 2025 with franchisee support. It could offer solutions for long lead times in electric bus procurement and improve sustainability by extending vehicle life.

AQAP 3.3 – Hybrid Bus Improvements

AQAP Action completed 2023.

AQAP 3.4 – Trial of Low-Emission Vehicles

AQAP Action completed 2023.

2.2.1.4 Cycling

AQAP 4.1 – Cycling Programmes

By the end of 2024, 120 km of Active travel routes to Bee Network standard had been built (routes with cycling, walking and wheeling provision). Provision of crossing facilities for walking and wheeling at 15 signalised junctions increased the total number to 171 and 202 junctions have retimed signals to reduce pedestrian wait times.

Stockport Interchange opened with active travel connections between the bus and railway stations. It includes an award-winning helix ramp providing traffic free connections for those walking wheeling and cycling from the shopping areas to the station, previously the route used the heavily trafficked A6, Figure 2-5. Along with a new cycle lane in West Street Oldham, we are prioritising safe and desirable active travel connections to public transport hubs.



Figure 2-5 - New Spiral Ramp Unveiled at Stockport Interchange

Cycle & Stride for Active Lives was a TfGM led project (with £1m funding from London Marathon Foundation) to help community groups become more active through walking, wheeling and cycling. The programme, which closed in late 2024, positively impacted the

lives of residents, with over 12,500 people regularly engaged in an activity (3,500 taking part in a led walk, and nearly 1,500 in a led cycle) and we trained 2,000 people in cycle maintenance. 98% of participants intend to continue walking or cycling regularly, and 74% said they feel more independent. A major aim of the programme was to work with a broad range of communities across GM. 83% of participants were from ethnically diverse communities and 69% were women or girls. 79% of whom feel more confident to travel actively in their local area.

Two cycle parking projects are underway. The first of these is supporting schools, small businesses and VCSEs (voluntary, community and social enterprises) to install cycle parking facilities to enable people to travel more by bike. Bids in excess of £1.2m were received and 121 organisations were offered funding to deliver over 2,500 new and improved cycle parking spaces at key community locations across all 10 districts. The second project focuses on the delivery of cycle parking provision at public transport interchanges supporting an integrated Bee Network.

Further funding has been made available to support our Bike Libraries programme. By summer 2025 we expect there to be around 50 libraries in operation. Bike libraries are local hubs where people can borrow a bicycle to try out. They aim to boost access to bicycles and allow people a chance to give cycling a go. For more information see [this link to the TfGM Bike Library webpage](#).

AQAP 4.2 – Public Cycle Hire

After GM's first cycle hire scheme launched in November 2021, it expanded in 2022 and 2023 throughout Manchester, Salford and Trafford, and now has over 2,500 stands, Figure 2-6. Usage has exceeded expectations in most areas, with an average 1.51 rides daily per bike. This was over 466,000 rides in 2024 and just under 1,100,000 rides and 2,783,000 km ridden in total since opening. 2025 will increase the ratio of e-cycles from 20% to 50% and expansion plans are underway.

The main factors influencing usage are seasonal, weather, academic holidays and bike availability. Between March-May 2023, an increase in vandalism correlated with new areas of GM being served and an increased number of bikes and stands. An action plan was developed to resolve the situation, which affected summer 2023 usage, though the scheme still attracted an average 3,000 new users each month. In summer 2024, most suspended stations re-opened, bringing the total number of active users to over 115,000,

Figure 2-7. In Sept-Oct 2024 there was a slight increase in vandalism and theft, leading to a drop in availability, but usage and users joining the scheme was not affected.

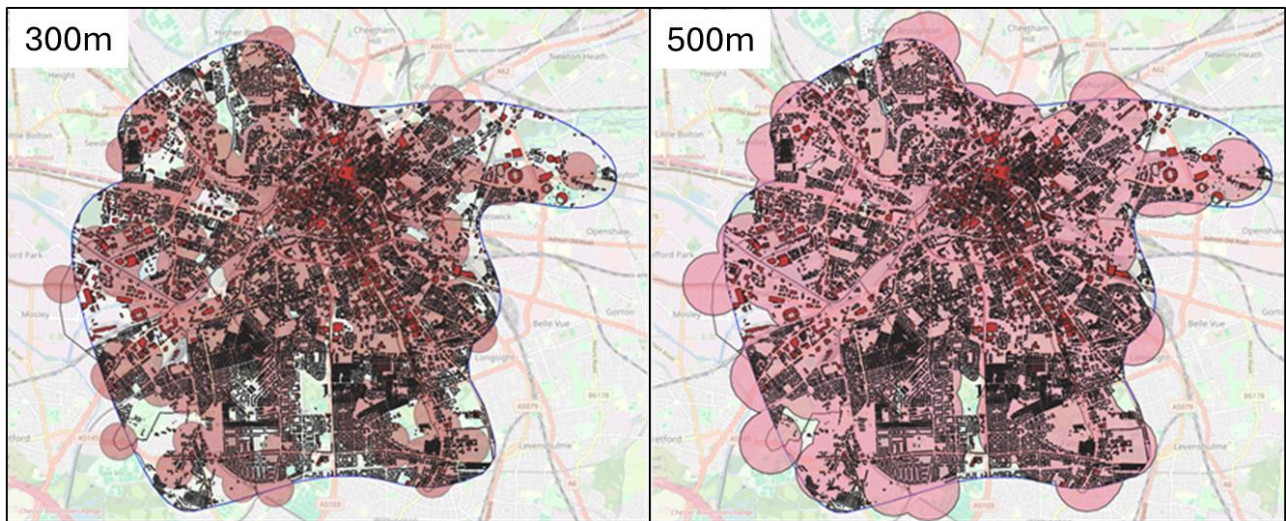


Figure 2-6 - Expanding Coverage of the GM Cycle Hire Scheme

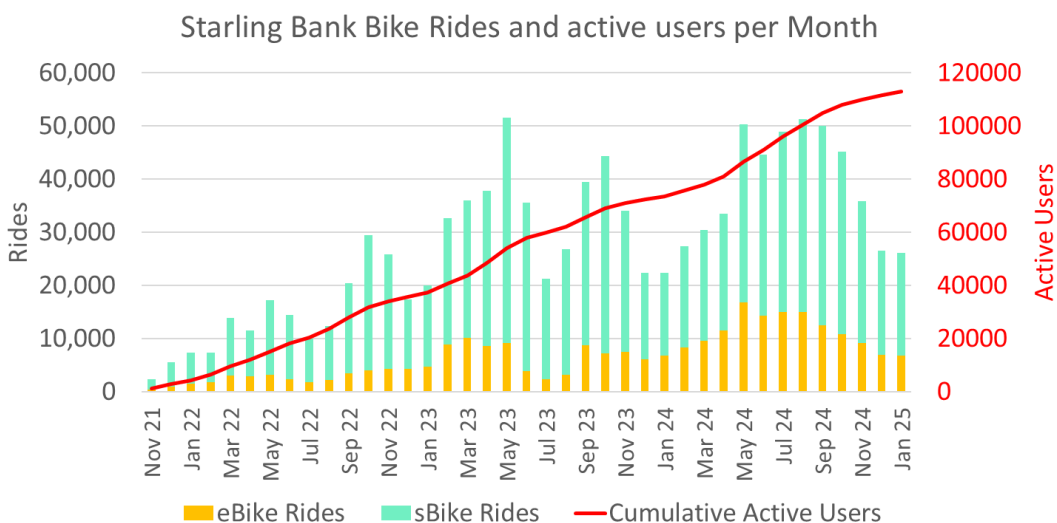


Figure 2-7 – Number of Active Users of the GM Cycle Hire Scheme and Number of Rides Since November 2021

AQAP 4.3 – Cycle Logistics

During 2022-2025, TfGM's Community Access Grant offered funding to community organisations, small businesses, NHS healthcare providers and education providers to deliver cargo cycles, accessible/adaptive cycles and/or community innovation. 157 groups applied (bids totalled more than £1.1m) with £530k allocated to 78 organisations. The project expects to deliver 67 new cargo cycles enabling organisations to:

- Conduct day-to-day logistics and transit activities specific to the organisation, replacing or significantly reducing the reliance on a motor vehicle.
- Provide additional services or widen the support they can offer to their community.
- Offer community members access to cargo bike solutions for daily tasks.

AQAP 4.4 – Walking & Wheeling to 2040

GM is making good progress in delivering on plans set out in the Active Travel Mission, under the guidance of Dame Sarah Storey, GM's Active Travel Commissioner. The mission is built around three foundations (accessibility, behaviour change and communications and engagement), and has six priorities: infrastructure delivery, home to school travel, cycle hire and access to cycles, integration with public transport, road danger reduction and providing access to everyone. Progress is reported in the second Active Travel in GM Annual Report (2024), which can be found via [this link to the GMCA](#).

2.2.1.5 Travel Choices

AQAP 5.1 – Car Clubs

In May 2024, work on a GM-wide car club was paused. One local authority has since released a tender which received no bids and the number of Car Club vehicles in GM is in decline. The EV business case is weak and an approach requiring minimal investment is needed to demonstrate the demand for Car Club provision in GM.

AQAP 5.2 - Dynamic Road Network Efficiency and Travel Information Systems

TfGM uses its traffic signal asset to dynamically manage the network with more than 1 in 4 junctions providing priority for Buses and Metrolink. The network comprises:

- 2,500 sets of traffic signals (1,400 junction and 1,100 pedestrian crossings), over half use adaptive control to vary timings with demand to minimise delays.
- 118 sites include control of Metrolink trams, providing them with full priority.
- A growing number of sites (currently 250) include priority for late running buses. with funding available for a further 140 junctions through CRSTS.
- 60 sets of signals are managed on behalf of National Highways to improve coordination across National and Locally managed networks.

Day to day management of the network includes:

- Urban Traffic Control engineers work with TfGM's Operational Control Centre to monitor the network making changes to the signal timings when necessary.
- Collaborating with local authorities both in advance and during roadworks to help minimise delays.
- Identify, develop and refine a range of signal strategies for known or recurrent demands on the network such as events and National Highways diversion routes.
- Reviewing signal timings based on changes in land use, travel behaviour etc.

TfGM have worked with Google on an AI project to ensure signal timings are optimised to reduce stop-start traffic and emissions. This initiative has delivered local benefits where signal timings were adjusted.

Changes at an Oldham junction (Hollinwood Avenue, near J22, M60) saw a 9% reduction in the number of stops (failing to get through the green light phase), saving an estimated 160 engine hours and 493 litres of fuel per year. Having the performance and operation of signals reviewed by an independent third-party provides assurance that the network works well, with the development and day-to-day operation delivering benefits.

During the Christmas Markets, travel behaviour increased congestion across GM at retail and town centres, and the Regional Centre. Weekend volumes in the Regional Centre were 12% above typical, equivalent to an extra 90,000 journeys to, from or through the Regional Centre. A programme of interventions was developed and delivered to manage congestion and travel demand. Messaging also encouraged sustainable transport modes with visitors to the Regional Centre advised not to drive on busy weekends.

Delivering greener event travel remains a focus of activity. The award-winning matchday bus network for Manchester City fans is set to grow after proving popular with fans. To cater for increased demand, five buses will be added to the busiest routes serving areas with poor public transport connections to the Etihad. The new buses take the total number for weekend matchdays to 20 and the number of locations served to 82.

TfGM continues to use variable message signs for Park & Ride sites and special events across the region, promoting more sustainable travel.

2.2.1.6 Cars

AQAP 6.1 – Plugged-in Places Electric Vehicle (EV) Network Charging

GM continues to experience significant growth in the EV charging network. The growth in private and publicly owned infrastructure has given residents and tourists more charging locations in GM, ensuring dense residential areas and leisure facilities are connected.

The existing Publicly Owned Infrastructure (POI) network is constantly monitored to understand usage and revenue. In 2024, TfGM's POI delivered over 1.1m kWh, an average of 3,195 kWh daily over the year and over 62,000 charging events were recorded. TfGM work with suppliers to maximise usage across the conurbation, for example, revising the tariff pricing matrix in June 2024 to ensure assets are competitive with other public charge points in the country.

Across GM, 60 rapid chargers solely for taxi and private hire use were live by the end of 2024, Figure 2-8. Locations can be viewed via [the link to TfGM Electric Travel website](#).



Figure 2-8 – Taxi Rapid Charging Point Installation

New POI infrastructure is planned, with the Local Electric Vehicle Infrastructure (LEVI) project seeing major developments in 2024. TfGM is working closely with the 10 LAs to develop a contract to procure a supplier in 2025. The aim of LEVI funding is to supply Electric Vehicle Charging Infrastructure (EVCI) to residents with no off-street parking and in areas not considered commercially viable. It is hoped that providing more infrastructure in these areas will increase EV usage and remove barriers to access and availability.

Supplier Owned Infrastructure has seen further development in 2024, with Greater Manchester showing as an attractive investment for EVCI. Across the whole of Greater Manchester, there are now over 1,400 charge points at over 450 locations. These charge points usually have multiple connectors, increasing availability for users. The speed of charge points varies across the network, from Slow (<3 kWh) to UltraRapid (150 kWh) with a network of over 40 suppliers.

Greater Manchester expects further investment into 2025, which will be accompanied by the development of the LEVI scheme and Local Authorities progressing programmes using CRSTS funding. These developments help to deliver the ambition to be net zero by 2038 and the goal of achieving a sustainable city region.

AQAP 6.2 – Car Use Allowance

Each local authority has provided their own update.

AQAP 6.3 – Local Authority Parking Charges

Each local authority has provided their own update.

AQAP 6.4 – School Travel

School Streets

- School Streets restrict access to motor vehicles at school drop-off and pick-up times to promote active travel for the school run. They lead to healthier, safer and greener environments outside schools, and improves the air that children breathe.
- Following the success of the Active Travel Fund 2 pilot programme, there are 27 schools with permanent School Streets. 10 School Streets have Experimental Traffic Regulation Orders with more in development. The positive impact on young people and schools has been recognised by Andy Burnham, Mayor of Greater Manchester, who committed to deliver 100 school streets by 2028.
- TfGM works with the 10 Local Authorities to achieve this. Capability Fund money has been ringfenced to deliver and develop schemes, and GM is committed to identifying more funding in 2025.

Youth Travel Ambassador (YTA)

- 19 secondary schools participated in two tranches of the YTA programme (across two academic years), this saw around 250 students and 25 staff continue their role or be newly appointed as travel ambassadors and school-coordinators.
- The YTA programme empowers students to deliver active travel behaviour change campaigns within their schools, impacting air quality by increasing the number of students walking, wheeling, and cycling, thereby reducing car use and emissions.
- Around 330 activities were delivered, reaching circa 22,900 students.

Modeshift STARS

- Modeshift STARS travel planning platform supports schools to identify active travel barriers staff, pupils and parents might face in getting to school. It helps to create action plans addressing these issues, leading to long-term behaviour change.
- Progress in 2024:
 - 137 new school users registered.
 - 13 new LA users registered.
 - Accreditations rose from 19 to 29 (quality of accreditation also rose - GM saw its first 2 “excellent” accredited schools)
 - New/improved guidance and resources created to help schools and LA officers use the platform.
 - New off the shelf resources for schools to promote active travel created and shared.

2.2.1.7 Information & Resources

AQAP 7.1 – Website and Online Resources

There were fewer updates to the Clean Air GM website as GM undertook further modelling work and awaited government feedback on updated proposals for the Clean Air Plan. As a result, there were fewer visits to the website than in 2023.

- 62,754 people visited the site compared to 187,561 in 2023.
- 113,381 page views compared to 346,271 in 2023.
- Engagement rate was 59% (an increase on 2023). Although the site received fewer visits, people were spending longer on the website engaging with its content.

The most visited pages in 2024 were:

- [Clean Air Plan page \(link in text\)](#) with 62,215 page views (47,513 users)
- [Homepage \(link in text\)](#) with 19,531 page views (15,630 users).
- [News page \(link in text\)](#) with 2,815 page views (2,308 users).

Traffic to the site was spread evenly throughout the year, with a spike in interest on the 19 of September (907 views, 364 users). This was due to a press release and subscriber newsletter announcing that Greater Manchester was preparing to submit an updated Clean Air Plan to government with no vehicle charges and proposed investment in newer, cleaner buses, taxis and local traffic measures to better manage traffic flow.

The Data Hub on the Clean Air GM website continues to be updated to include the most recent air pollution data for GM. This includes changes to the map of diffusion tubes used for Clean Air Plan and Local Air Quality Management monitoring.

AQAP 7.2 – Online Route Finding

The Journey Planner went live on the TfGM website in 2023 and the Bee Network app at the start of 2024. It shows the options available for each journey and associated distance and estimated travel time (example shown in Figure 2-9). If public transport is chosen, the tool also displays real-time departures.

A live bus tracking tool launched in March 2024, incorporating the bus location, upcoming departure times from a chosen stop and travel disruptions (example shown in Figure 2-10). 1.8 million buses are tracked by customers each week demonstrating the need for greater confidence in planning effective journeys using public transport.

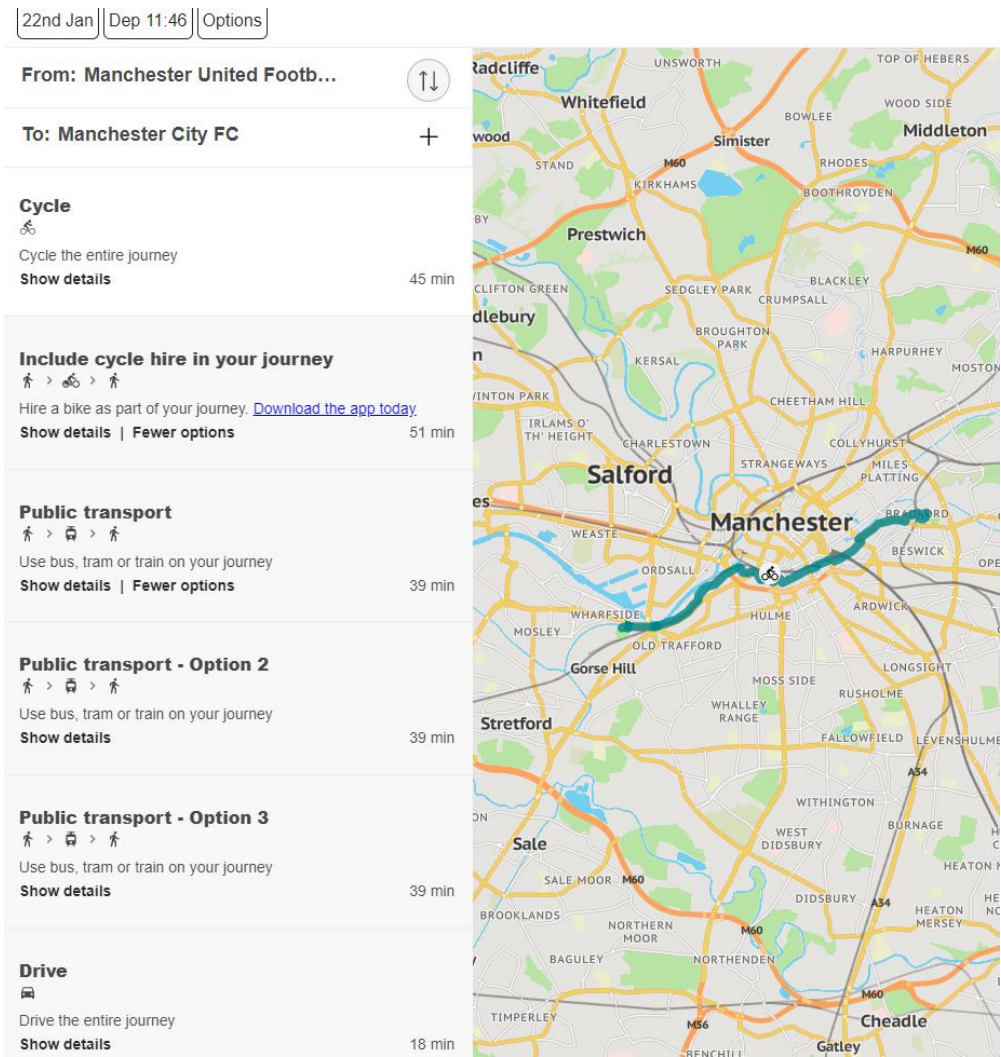


Figure 2-9 - Example of the TfGM Journey Planner tool

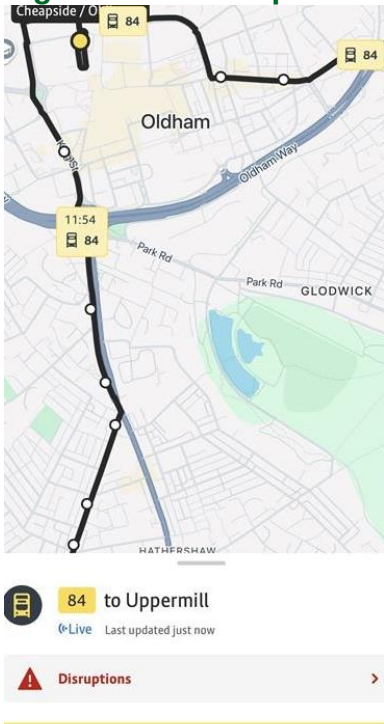


Figure 2-10 - Example of the Live Bus Tracking tool

AQAP 7.3 – Air Pollution Alert

The Pollution Alert service has been in operation since 2019. The number of subscribers increased from 673 to 717 during 2024, with the majority requesting an alert for Manchester.

AQAP 7.4 – Health Effects of Air Pollution within Greater Manchester

GM has previously reported on AQAP 7.4 by discussing the health effects of air pollution within the region. In summary:

- 2021 – COMEAP updated advice regarding health evidence relevant to setting targets for PM_{2.5} ([Link to COMEAP report](#)). GM used the recommendations and calculations for quantifying mortality rates and hospital administrations associated with long-term exposure to particulate matter.
- 2022 – The Chief Medical Officer’s Annual Report on air pollution was referenced as a tool to use moving forward ([Link to report](#)). It sets out recommendations to reduce air pollution, some of which Greater Manchester is adopting.
- 2023 – GM conducted further literature reviews this year to integrate the latest into our air quality work. A notable example was on deprivation-based inequality and exposure to NO_x from transport and heating ([Link to article](#)).
- 2024 - Work planned for this objective has been met. However, considering the developing research on links between air quality and health, GM continues to collaborate with local partners. This includes the UK Health Security Agency, NHS and Local Authorities to ensure workstreams are aligned and any work is evidence-based to ensure consistent messaging amongst stakeholders.
- Future work - Public Health Outcomes Framework informs GM’s work to improve air quality in the region and resident health in relation to PM_{2.5} exposure. Potential to collaborate with public health colleagues to develop evidence-based advice, actions and recommendations to improve air quality across GM, raise awareness of the health impacts of air pollution, and reduce inequalities in those impacts.

AQAP 7.5 – Contingency Response Plan

Greater Manchester Resilience Forum has robust multi-agency plans in place to respond to major incidents within Greater Manchester and surrounding Local Resilience Forums, including those impacting air quality such as major fires and heatwaves. The plans detail multi-agency structures which can be activated as needed, bringing together partner agencies who can provide expert guidance and tools to monitor air quality and develop a comprehensive public communications plan tailored to each situation.

AQAP 7.6 – TfGM Air Quality Team

TfGM continues work internally and with the 10 local authorities in GM to improve air quality across the region. In 2024, the TfGM Air Quality Team gained a new Air Quality Lead Officer, to support ongoing work and to develop collaborations with relevant stakeholders.

Every quarter, TfGM chair the Greater Manchester Air Quality Working Group, a group active for over 40 years, set up to tackle challenges around air quality in the region. The group has representatives from each local authority and invitees from ongoing projects, supported by Director of Public Health (with lead responsibility for air quality), the University of Manchester and UKHSA.

The Defra funded PM_{2.5} project is ongoing and providing monthly and quarterly reports on indicative air quality recorded at each monitoring site, along with other useful information such as transboundary contributions, giving valuable insight into air quality trends across the year and sources. A full update will be provided upon completion of the project in 2026.

TfGM manage the Clean Air GM Data Hub, hosting monitoring data and forecasts, and the GM Air Quality Alerts. TfGM, with the 10 local authorities, continue to respond to requests for air pollution information and seek robust evidence-based responses from technical experts.

Greater Manchester Air Quality Working Group are in the process of re-tendering the Data Management and Service and maintenance contracts for the Greater Manchester Air Quality Network (to complete 2025), a monitoring network of 24 locations across the region and includes Automatic Urban and Rural Network (AURN) sites.

AQAP 7.7 – Air Quality Monitoring Database

The Clean Air GM Data Hub continues to be updated with the most recent air pollution data for GM to inform stakeholders about current air quality. The data comes from non-automatic (diffusion tube) and automatic sites on the GM Air Quality Network.

AQAP 7.8 – Traffic Data

During 2024 TfGM has operated an Automatic Number Plate Recognition (ANPR) network across GM. This data on vehicle fleet mix and taxi frequency, has been reviewed by the CAP to understand road vehicle emissions and their contribution to

areas of poor air quality. It will be used during the monitoring and evaluation phase of the CAP, along with NO₂ monitoring data, to determine progress.

AQAP 7.9 – Awareness Raising

Each local authority has provided their own update.

2.2.2 Progress on actions for Bolton Metropolitan Borough Council

2.2.2.1 Development Control and Planning Regulation

AQAP 1.1 – Construction Management Guidance

Bolton Council requires Construction Environmental Management Plans to be submitted and adhered to for large developments where dust and noise emissions may be a concern. These are required through the development control system and conditions are imposed requiring appropriate measures to be undertaken. Relevant measures to reduce emissions from the building works, include (but not limited to) wheel cleaning/wheel washes, damping down of roads and stockpiles, and inspections off-site to ensure that there are no visible emissions off site.

AQAP 1.2 – Development Planning Guidance

The Council adopted a new planning validation checklist in December 2024 setting out in detail which developments require an air quality assessment, it is available via [this link to the Bolton Local Validation Checklist](#). Air quality assessments are required for significant developments, such as large residential developments, industrial estates, combustion processes and large retail premises. The air quality assessments are considered to determine whether the proposed development would have a significant impact on air quality in the area. It is a requirement that the Air Quality Assessment should:

- Demonstrate future occupants of the residential development would not be at risk of harm due to poor air quality and how any residual risks would be mitigated.
- Demonstrate that the development would not exacerbate any existing air quality issues and how any residual risks would be mitigated.

AQAP 1.5 – 20 mph Zones

The Council introduced 20 mph zones outside schools several years ago as a safety measure to reduce speeds and prevent accidents. The majority of these are variable 20 mph zones that are activated at school start and finish times, without hard measures such as speed bumps. There are no plans to introduce new 20 mph zones in Bolton for air quality purposes.

AQAP 1.6 – Encouraging Travel Behaviour

Conditions are imposed on major planning applications requiring the implementation of travel plans. The types of development requiring travel plans include schools, industrial estates and some residential developments. The Planning validation checklist and Accessibility, Transport and Safety Supplementary Planning Document set out where a Travel Plan is required. The aim is to reduce car use, particularly single car occupancy use, and increase walking, cycling and public transport access to new developments. Bolton Council adopted a new Transport strategy in July 2024, which can be viewed through [this link to the Bolton Transport Strategy](#). One key objective of the strategy is to be environmentally responsible in Bolton by lowering carbon and improving air quality.

AQAP 1.8 – Green Infrastructure

Bolton Council continues to work with City of Trees ([Link to City of Trees website](#)) in relation to identifying suitable locations and planting trees in the borough. Additional tree planting was announced in 2024, which will create new woodland covering 5 hectares in 11 different locations across the borough.

The Council, with partners, have developed several decarbonisation projects. Whilst these projects are aimed primarily at reducing carbon emissions, they will also reduce other emissions contributing to local air quality improvements. The Council were successful in a funding bid from the Green Heat Network Fund. £11 million was awarded to develop a district heating system in the town centre using an air source heat pump to extract warmth from sewers running beneath the town. This is still at development stage but will replace traditional fossil fuel heating systems and reduce emissions.

2.2.2.2 Freight and Heavy Goods Vehicles

AQAP 2.7 – Engine Idling

Bolton Council receive a handful of complaints each year about engine idling, which are dealt with informally by providing advice. The Council does have an enforcement toolkit available designated to issue fixed penalties under the Road Traffic (Vehicle Emissions) (Fixed Penalty) (England) Regulation 2002 if persistent offenders are identified.

2.2.2.6 Cars

AQAP 6.2 – Car Use Allowance

Car allowances within the Council are only paid for essential journeys, car parking charges are only paid in exceptional circumstances, which encourages people to walk/use public transport for appointments in town and district centres. People are encouraged to host and attend meetings using teleconferencing rather than in-person to

reduce the need to travel. The Council has invested in tele-conferencing facilities (screens, speakers etc.) to improve the capacity for hosting remote meetings.

AQAP 6.3 – Local Authority Parking Charges

Parking charges have not been reviewed in 2024, One of the priorities of the new Bolton Transport Strategy is to review the Council's Parking Strategy.

AQAP 6.4 – School Travel

St. Peters school in Farnworth introduced the first School Streets initiative in 2023. The scheme closes roads around the school, encouraging families to walk and cycle rather than use cars, thereby reducing emissions. The scheme continues to operate, and the Council is supportive of other schools wishing to implement similar schemes.

The Council offers a Bikeability scheme to schools to encourage safe cycling by pupils to and from school and in the wider community, [link to Bikeability Bolton](#).

Bolton's newly adopted Transport Strategy sets out priorities to encourage active travel, particularly to and from schools.

2.2.2.7 Information & Resources

AQAP 7.9 – Awareness Raising

Throughout 2024, social media was used to try and improve the air quality in Bolton by raising awareness. The main strand of this was raising awareness of the 'GM Burn Better' campaign. This was regularly promoted to encourage residents who use solid fuels to use the right fuels correctly to reduce air pollution. Information on air pollution and transport, particularly around active travel is published on the Council's website, which can be viewed at [this link to Transport and Travel – Bolton Council](#).

2.2.3 Progress on actions for Bury Metropolitan Borough Council

2.2.3.1 Development Control and Planning Regulation

AQAP 1.1 & 1.2 – Construction Management Guidance / Development Planning Guidance

- Air Quality Assessment Reports are requested for major developments where the impact of local air quality may be significant.
- EV charge points for all residential and commercial (with car parking spaces) developments are required through the planning and building regulations approval process.
- A policy on Air Quality and Pollution Control with the aim of preventing both new and existing development from contributing to, or being adversely affected by,

unacceptable levels of pollution and poor air quality is set out within the Draft Bury Local Plan (March 2025). Under this policy, applicants would have to submit a Pollution Assessment.

- Places for Everyone (2024) also includes a policy which requires planning applications to submit air pollution data so that development is only permitted where air quality would be acceptable, or provide suitable mitigation, and restricts developments which would generate significant point source pollution.
- New Town Centre Plans include air quality considerations.

AQAP 1.5 – 20 mph Zones

Five 20 mph speed limit schemes were introduced at the following locations in 2024:

- i) Trees Estate – Whitefield – 20 mph speed limit area
- ii) Park Road / Windsor Road area – Prestwich – 20 mph Zone & Traffic Calming
- iii) Elton Vale Road – Bury West - School 20 mph speed limit scheme
- iv) Pimhole Road – Bury East – School 20 mph Zone scheme
- v) Walshaw Road – Bury West - School 20 mph Zone scheme and new traffic calming.

AQAP 1.6 - Encouraging Travel Planning

- Travel Plans are required and submitted with certain planning applications.
- The Council's full-time Active Travel Activation officer is continuing to encourage behaviour change and the use of new infrastructure. This post has funding for an additional 12 months to cover 2023/24.
- Bury are working with local communities, schools and colleges to encourage active travel and this includes the mapping of "safer routes" by "Living Streets." Our Highways Officers are now looking at options to activate these safer routes.
- Bury's Local Transport Strategy (2023) sets the strategic direction for travel and mobility within Bury. The investment priorities set out within the Bury Transport Strategy promote health and wellbeing through active travel and help meet the borough's commitment to having fossil-fuel free travel by 2038.

AQAP 1.8 – Green Infrastructure

- Places for Everyone and the Draft Bury Local Plan set out plans for the borough's green infrastructure.
- Bury's new town centre redevelopments are progressing and will include green space provision (Bury, Prestwich, Radcliffe and Ramsbottom).
- The council has planted 2,647 whips and 191 standard trees as part of its woodland creation activities.

- Four Bury organisations were successful in gaining Green Spaces Funding to enhance local natural spaces.
- The Council is working with City of Trees to establish an Urban Forestry Hub in Barnfield Park
- The Council now has 14 Green Flag Sites, including 13 parks and 1 cemetery.
- There is ongoing active engagement between the Parks team and local communities.
- A new officer on the countryside team has been hired to assist volunteers with managing green spaces.
- City of Trees projects are ongoing across Bury as well as other local action groups championing action and engagement.
- The Council are publishing their biodiversity strategy following a consultation in 2024.
- Whitefield Environmental Forum is working specifically with schools to increase tree cover.

2.2.3.4 Cycling

AQAP 4.1 – Cycling Programmes

- Work has started on highway modifications to support walking and cycling in Fishpool and Pimhole. Altogether, £8.25m has been awarded to the neighbourhood from four separate external funding pots to improve junctions, road crossings and create a more pleasant environment. The work is programmed to be complete by 2027.
- Work is planned to start in spring 2025 on a new Milltown St bridge to replace the one lost in the 2015 flood. The new bridge is wider so it can be used by cyclists as well as pedestrians.
- Design work continues in and around Bury, Radcliffe and Ramsbottom town centres on approximately £15m of externally funded ‘Streets for All’ schemes. It is hoped that construction will start late in 2025.
- Bike Libraries have opened at Clarence Park, Radcliffe and Openshaw Park, Bury, Bury Library, Prestwich (Creative Living) with plans to install a further facility at Ramsbottom. An additional bike library has opened at Grundy Day Care Hub for clients use. Figure 2-11 shows the opening of the Bike Library outside Bury Library.



Figure 2-11 - Cllr Tamoor Tariq, cabinet member for health and wellbeing, and council officers at the Bike Library outside Bury Library

- An award scheme called Modeshift STARS has been implemented. This award will be granted to schools or other establishments where pupils change travel mode to active travel/public transport. 10 of Bury's schools are now involved in this initiative
- Bikeability training is being carried out in schools to build cycle confidence. This is delivered by the Nationwide Cycling Academy and offered to all Primary Schools and High Schools in the borough. In the financial year 2024/25 we have trained: 1850 level 1&2 places, 35 level 3 places, 10 level 1 places, 195 balance bike places and 134 learn to ride places.
- TfGM Learn to Ride and Road Rider Ready training courses are available for free and delivered fortnightly in Clarence Park (TfGM's North Manchester hub for training).
- 47 Basic and intermediate bike maintenance courses were delivered in 2024/25 by the [Nationwide Cycling Academy in Whitefield \(link in text\)](#).
- The 'Wheels for All' programme is continuing at Clarence Park and is now active at Bury Athletics Club, Figure 2-12.
- A Bike Hospital has been set up at Clarence Park where residents of Bury can come to have their bikes repaired. A Bury Bike Hospital information poster is shown in Figure 2-13.



Figure 2-12 - The Wheels for All project in action



Figure 2-13 - Bury Bike Hospital information poster

AQAP 4.2 – Public Cycle Hire

- Radcliffe, Clarence Park, Openshaw Park and Bury Library public bike hire/libraries are operational and being used. There is an aspiration to have a bike library in each ward, but this will depend on the availability of funding.

2.2.3.5 Travel Choices

AQAP 5.1 – Car Clubs

- The car club pilot scheme has been completed with some success. However, there were several vandalism incidents to cars at the Market Car Park which restricted the operation and impacted the longer-term viability of this car club hub.
- Bury Council conducted a procurement exercise to appoint a car club operator but received no submissions to the invitation to tender. The proposal now is to await development of a GM-wide car club.

2.2.3.6 Cars

AQAP 6.1 – Plugged-in Places EV Charging Network

- Bury are working with TfGM and other GM councils to use City Region Sustainable Transport Settlement (CRSTS) and Local Electric Vehicle Infrastructure (LEVI) funding to appoint a supplier to deliver a comprehensive network of fast charge points throughout GM. These charge points will be to serve those residents without access to off street parking.

AQAP 6.2 – Car Use Allowance

- Re-launch of Bury council's bike travel allowance scheme.

AQAP 6.4 – School Travel

- The School Streets scheme at Guardian Angels RC Primary is still operational but it has been difficult to develop further schemes due to limited resource in Bury's highways team.
- Bury Council's Public Health Team are developing a public health accreditation scheme to reward schools adopting active travel programmes. A draft information poster is shown in Figure 2-14.
- Nine Bury schools participate in WOW which is an active travel tracking project operated via Living Streets, Figure 2-15. Bury are hoping to gain further Active Travel England funding to support more schools with this initiative.
- Bury's Walking and Cycling Forum continues to be well attended and provides a dynamic arena for consultation and the exchange and development of ideas from Bury stakeholders.



Figure 2-14 - Draft Leaflet Promoting Active Travel Schools Accreditation Scheme



Figure 2-15 - Poster Designed by a Year 1 Bury's WOW School Pupil to Encourage Active Travel

2.2.3.7 Information & Resources

AQAP 7.9 – Awareness-Raising

- Bury has continued to promote the Burn Better GM campaign across Autumn-Winter 2024. This includes a social media campaign to raise awareness of the implications of wood burning and how to minimise pollution from solid fuel burners, Figure 2-16.



Figure 2-16 – Bury Council Social Media Post Promoting BurnBetterGM campaign

2.2.4 Progress on actions for Manchester City Council

2.2.4.1 Development Control and Planning Regulation

AQAP 1.1 – Construction Management Guidance

Although this action is complete, Manchester City Council (MCC) have:

- Continued to promote the council's published [AQ & Planning Guidance \(link in text\)](#) for developers including best practice air pollution control measures for demolition and construction site works.
- Continued to recommend minimum emissions standards for Non-Road Mobile Machinery for city centre major developments.

AQAP 1.2 – Development Planning Guidance

Although this action is complete, MCC have:

- Continued to promote the [AQ & Planning Guidance \(link in text\)](#) for developers.
- Continued with planning development requirements, including:
 - air quality impact and exposure assessments
 - mitigation such as electric vehicle charge points
 - boiler emissions standards
 - travel plans

AQAP 1.4 – Clean Air Zone Appraisal

Action has been reported on at a Greater Manchester level. Please refer to Section 2.2.1

- Progress on actions across Greater Manchester for an update on this objective.

AQAP 1.5 – 20 mph Zones

- During 2024 the council's Neighbourhood teams supported [MCRactive \(link in text\)](#) to deliver 28 Active Streets and support seven community and school-led Play Streets, examples are shown in Figure 2-17 and Figure 2-18.



Active Streets is an initiative we deliver across neighbourhoods in partnership with Manchester City Council North Neighbourhoods Team & One Manchester, demonstrating real 'social value' in action.

These events bring together a range of services including waste and recycling, street cleansing and sport. Last year we 'closed off' 14 different streets in 12 wards, with nearly 600 adults & children enjoying activities from snakes & ladders to table tennis and swing ball, leaving a lasting resource for continued delivery by residents.

Figure 2-17 - MCRactive Website Explaining the Work of Active Streets



Figure 2-18 - Montage of Active & Play Streets in Manchester

AQAP 1.6 – Encouraging Travel Planning

- The Planning Team at Manchester City Council continued to work with developers to secure sustainable transport strategies for new developments and reduce car parking where possible.
- MCC published the [Manchester Active Travel Strategy \(link in text\)](#) in spring 2024 after listening to resident's feedback on what prevented active travel as part of their everyday lives. MCC's residents want more and safer places to walk, wheel and cycle. The target of the strategy is that MCC convert existing and future short journeys to walking, wheeling and cycling. To do this MCC have a set of ambitions that will support a pipeline of projects and future initiatives. More details are included in the strategy.

AQAP 1.8 – Green Infrastructure

Trees:

- MCC's Executive approved a new 10-year Tree and Woodland Action Plan in March 2024. MCC are working towards a goal of increasing Manchester's tree canopy from 18.8% to 21.8% by 2050.
- Manchester received confirmation of a successful Forestry Commission Urban Tree Challenge Fund bid, with £560,000 going towards purchasing, planting and maintenance of 828 trees in communities across the City over 2024/26.
- During the 2024/25 planting season MCC will have planted 4397 trees, including 1662 hedge trees and 4 new orchards.

Broader Green and Blue Infrastructure Activity:

- Holt Town: A major regeneration opportunity to develop 74 acres (30 ha) of underused, mostly brownfield land, to deliver a new mixed use neighbourhood. Consultation was undertaken during summer 2024 regarding the new Holt Town Masterplan. This will include significant affordable housing, commercial space, an exciting new cultural offer, and new high quality green space with a play street. In total, 15 acres of new and enhanced public green space is planned, incorporating both enhanced and regrown woodland.
- Castlefield Viaduct: In June 2024, a new 'Vision' was produced for Phase 2 of possible improvement work as a direct response to public feedback from viaduct visitors and the local community. The long-term vision is to transform Castlefield Viaduct into a free-to-access park and meeting place for people and nature. A Planning application was submitted for Phase 2 and the National Trust is actively seeking investors and funders to support the plans and secure the viaduct's future.

- Nature of Moss Side Study: Sow the City worked on a study building on work commissioned by the Council (Nature of Manchester, Nature of Hulme). The study will guide priorities for Climate resilient projects in the area, including a focus on clean air.

2.2.4.2 Freight & Heavy Goods Vehicles

AQAP 2.7 – Engine Idling

- The council continued to have regard to the anti-idling options report previously produced for GM AQ officers and continued to seek to resolve issues informally and via an education & awareness-raising approach.
- In March 2024, Manchester's Neighbourhood teams undertook anti-idling awareness-raising in Levenshulme by engaging with businesses and putting up signage.
- The council continued to tackle idling around schools with an education and awareness-raising approach via the Neighbourhood teams' school engagement activities.

2.2.4.5 Travel Choices

AQAP 5.1 – Car Clubs

- MCC continues to partner with Enterprise Car Club to provide staff with a flexible way to hire a low-emission car for in-work travel.
- Development of a GM-wide car club continued, with MCC involvement.
- MCC published a Sustainable Staff Travel Guide to help council staff to travel without using a car. The guide provides financial and practical help, such as public transport ticketing options available to Council staff, and information on the government's Cycle to Work scheme.
- The council continued to promote sustainable travel and air quality over staff communications, via community engagement and university projects, and to the public via Council web pages.

2.2.4.6 Cars

AQAP 6.2 – Car Use Allowance

- MCC have continued to review, develop and promote sustainable and active travel options for staff, including cycle mileage and EV purchase via salary sacrifice scheme.

AQAP 6.3 – Local Authority Parking Charges

- MCC does not currently charge staff for parking in council office car parks.

AQAP 6.4 – School Travel

- In 2024, Manchester's Neighbourhood teams continued to support School Streets and trained pupils as Junior Police Community Support Officers.
- Acacias Primary School in Burnage was supported in obtaining an Experimental Traffic Regulation Order (ETRO) for Mondays to Fridays between 08:15 to 09:00 and 15:00 to 15:45 hours. The ETRO prohibits vehicular traffic around the school with the aim of improving safety and air quality for pupils, Figure 2-19.
- The council continued to tackle idling with an education and awareness-raising approach via the Neighbourhood teams' school engagement activities.



Figure 2-19 - ETRO in Operation Outside Acacias Primary School, Burnage

2.2.4.7 Information & Resources

AQAP 7.1 – Website and Online Resources

- MCC led the production of a Greater Manchester Smoke Emission Enforcement toolkit, which was published on Defra's Air Quality Hub during 2024. The AQ Hub is an online information and knowledge sharing resource for local authority air quality professionals. The toolkit contains procedures and templates for smoke enforcement work in accordance with legislation and Statutory Guidance. See also AQAP 7.9 - Awareness Raising.

AQAP 7.3 – Air Pollution Alert

- The Clean Air GM forecast and alerts website was promoted via General Practitioners using the 'Clean Air Practices' toolkit. See AQAP 7.9 - Awareness Raising.

AQAP 7.9 – Awareness Raising

Active Travel – see **AQAP 1.5**

Schools – see **AQAP 6.4**

Clean Air Practices:

- MCC's work with colleagues in the Public Health team; a pilot trial of 'Clean Air Practices' with GP surgeries, concluded. The trial aimed to promote awareness of air pollution and encouraged sign-up to the Clean Air GM pollution alert service for patients with respiratory conditions. A toolkit was developed in collaboration with participating GPs, who provided their clinical expertise on how to deliver messages to their patients. Resources were subsequently distributed to all Manchester GP surgeries, the asthma clinic team, and council teams who deliver community health and care services. The toolkit includes an overview document with social media templates, posters, a booklet including easy read materials, and details on how surgeries can place orders for printed materials. The toolkit was shared with GM colleagues for use in other districts.

Domestic Burning campaign:

- The council is involved with the Defra-funded GM campaign which aims to reduce particulate pollution from domestic solid fuel burning and raise awareness of the health and environmental impacts of stoves use.
- Manchester led on the production of a Smoke Emission Enforcement toolkit for use by GM local authority officers in dealing with domestic smoke emissions.

2.2.5 Progress on actions for Oldham Metropolitan Borough Council

2.2.5.1 Development Control and Planning Regulation

AQAP 1.1 – Construction Management Guidance

The impact and control of particulates and dust from the construction and demolition of developments continues to be controlled by Oldham's Environmental Health team, by both requesting and assessing Construction Environmental Management Plans (CEMPs) using the Institute of Air Quality Management (IAQM) construction management guidance. Environmental Health continues to offer support and advice to developers at

the preapplication stage of the planning process, helping to ensure the correct reports, including air quality and CEMPs are submitted as part of the application.

AQAP 1.2 – Development Planning Guidance

In 2024, Environmental Health at Oldham Council were consulted on 375 planning applications. All were assessed against the latest IAQM planning guidance and, where appropriate, relevant conditions relating to air quality were recommended to Planning. Numerous applications were submitted with Air Quality Assessments which were reviewed and commented on using IAQM guidance.

AQAP 1.5 – 20 mph Zones

20 mph zones were introduced in parts of Saddleworth in 2020 due to an increase in footfall, leading to streets crowded with pedestrians. Since then, levels of NO_x have been monitored and seen to be consistently less than the measured levels in 2019. However, it is uncertain at this stage how much of this reduction is due, in part, to a reduction in traffic levels post covid, improvement in the fleet Euro category or the 20 mph speed limit. A longer period of monitoring is required before conclusions can be drawn.

AQAP 1.6 – Encouraging Travel Planning

Oldham continued to engage with the TfGM Travel Choices and Active Travel Teams to promote active travel, travel choice programmes and journey planning across Oldham. The council's transport, parking and travel website links directly to TfGM's "Every Journey. Every day" travel planning website. In addition, it encourages residents to cycle as an alternative to other more polluting forms of transport. The council's website promotes the Bikeability Trust, Cycling UK, TfGM Bee Network and Sustrans. Travel plans are considered as part of the planning application regime. In 2024, we reviewed approximately 10 travel plans from businesses as part of this process.

AQAP 1.7 – Taxi & Private Hire Licensing

All new licensed vehicles in Oldham must meet Euro 6 emission standards for diesel and Euro 4 for petrol. All existing vehicles on the taxi/private hire fleet must meet this standard by the end of 2025. At present 96% of the private hire fleet and 85% of the Hackney carriage fleet comply with this standard.

AQAP 1.8 – Green Infrastructure

A business growth grant was introduced by the council in 2024. It aims to support the growth of businesses in the borough. Priority will be given to businesses in key sectors including low carbon/green technology.

2024 saw the Council announce that it had received a £1.2 million grant for green infrastructure works in the Medlock Valley including the planting of approximately 5000

trees and understory planting and restoration work across the Ashton and Rochdale canal network.

Work has begun on a brand-new park at Broadway Green, Chadderton including the planting of hundreds of new trees in this new green space.

In 2024, the Council held a Green Summit for businesses based on sustainability where they discussed best practice and were signposted to green grants and financial support. The Council has renovated its service depot at Alexandra Park to make it a Net Zero compliant facility, with a brand-new state-of-the-art office building heated by Air Source Heat Pumps. The new Eco-Centre is not only a council depot but has facilities for public use, enabling residents to see these environmentally friendly technologies in action. The Eco-Centre is situated adjacent to the Northern Roots site, where sustainable technology and building approaches will be showcased; residents will be able to enrol in courses to gain environmental qualifications as well as take part in events and programmes.

2.2.5.2 Freight & Heavy Goods Vehicles

AQAP 2.1 – TfGM Delivery and Servicing Plan (DSP) Toolkit

Oldham Council moved into our new Council Office building in the centre of Oldham (The Spindles) at the end of 2024. The council will consider whether it is appropriate to introduce the Delivery and Servicing Plan Toolkit to this building.

2.2.5.3 Buses

AQAP 3.4 – Trial of Low-Emission Vehicles

Oldham Council trialled a number of different electric van types in 2024 and will be purchasing and hiring new electric vehicles based on the results of these trials in 2025.

2.2.5.4 Cycling

AQAP 4.1 – Cycling Programmes

Last year, plans were revealed for St Mary's Way in the town centre to add safer cycle tracks, upgraded bus stops and more greenery. This should make Oldham Town centre more accessible to cyclists. Air quality monitoring to compare a before and after scenario has begun.

2.2.5.6 Cars

AQAP 6.1 – Plugged-in Places EV Charging Network

Construction of a charging hub, constructed by EV network Be.EV, began in 2024. It is sited on the plot of a former petrol station on the corner of Reliance Street and Oldham Road, straddling the border of Manchester and Oldham. The site includes 12 ultra-rapid

charging bays, four waiting bays to queue in case the chargers are busy, and a destination cafe. The ports can charge electric cars to 80% in 20 minutes. 16 ultra-rapid charging bays have also been installed at the Gateway Centre, Chadderton.

AQAP 6.2 – Car Use Allowance

The Council continues to operate its staff car user allowance with the aim of encouraging staff to use cars that minimise harmful exhaust emissions, run on ‘greener’ fuels, and minimise consumption of fuel where possible. The council aims to discourage non-essential car use by staff for work to help reduce congestion, improve air quality and improve road safety. This is supported through various initiatives such as the Travel at Work Protocol, Climate Change Strategy, GM Air Quality Action Plan and the GM Local Transport Plan. Oldham Council continue to offer a generous 32p a mile mileage rate for pedal cycle use to encourage staff to cycle rather than use cars, where possible for work journeys. To encourage staff to travel to work by public transport rather than car, the Council offers a loan scheme to help staff pay for annual public transport season tickets.

AQAP 6.4 – School Travel

In 2024, several schools in Oldham worked with the Council’s strategic transport team and went on to achieve “Modeshift STARS” Accreditation (or improved their existing accreditation). This is a national award scheme conferred on schools that demonstrate excellence in promoting sustainable travel and recognises schools that, through modal shift, reduce congestion and improve air quality. The schools are:

- The Blue Coat School
- Christ Church CofE Primary School
- Buckstones Primary School
- Hey-with-Zion Primary School
- St Edwards RC School
- Saddleworth School

Four schools introduced new School Street Active Travel Schemes which encourages parents not to use cars to take their children to school, making active travel more accessible and alleviating congestion and improving air quality. The schools are:

- St Annes Primary School
- Buckstones Primary School
- Hey-with-Zion Primary School
- St Edwards Primary School

250 residents participated in Oldham's Safe and Active Travel to school audit which looked at the actions residents would like to see put in place to help children walk or cycle to school more safely. The main priorities to be considered going forward are expanding the School Street active travel initiative, implementing 20 mph zones around schools, ensuring inclusive design for accessibility, enhancing cycle parking facilities at schools and introducing green infrastructure and pocket parks to enrich the school travel experience.

2.2.5.7 Information & Resources

AQAP 7.9 – Awareness-Raising

Oldham Council used its social media channels to promote issues relating to air quality in 2024, including for the Burn Better campaign. This discourages residents from burning solid fuels, if possible, and where not possible, advises on actions residents can take to reduce pollutants, such as PM_{2.5}. Clean Air Day, 20 June 2024, was also promoted on social media by encouraging residents to walk, cycle, use public transport and car share instead of using one's own vehicle as normal. Events advocating cycling were promoted on social media including Cycle to School Week, Positive Cycles (a charity that renovates bikes and gives them to local families or sells at low cost to residents) and The Tour of Britain Women, which finished its final day through parts of Oldham.

2.2.6 Progress on actions for Rochdale Metropolitan Borough Council

2.2.6.1 Development Control and Planning Regulation

AQAP 1.1 - Construction Management Guidance

All developments within the Air Quality Management Area, or those likely to have an impact upon it, are required to complete an air quality assessment as part of the planning process. In addition, all developments are required to submit a dust management plan in line with current guidance, to ensure all dust emissions are controlled.

AQAP 1.2 - Development Planning Guidance

Rochdale BC requires all new developments, both commercial and domestic and those undergoing significant change, to install electric vehicle charge points prior to completion and within the specified requirements. An assessment of the use of solar panels and sustainable building methods is also a requirement for new developments as we hope to increase sustainability. This has led to several new developments incorporating solar panels into new housing in the borough.

AQAP 1.5 - 20 mph zones

20 mph zones are in place across the borough for all new and existing housing developments, this along with traffic calming measures has helped improve air quality in residential areas by reducing speeds and traffic.

AQAP 1.6 Encouraging Travel Planning

Rochdale BC has a well-developed Transport Strategy originally developed in 2014 but has subsequently been updated and aims to deliver a transport vision that *"By 2026, Rochdale Borough will have a safe, affordable, sustainable, reliable, accessible and integrated transport network that offers travel choice for all, serves its communities, tackles air quality and climate change, enhances social inclusion, public health and supports the regeneration and economic growth of the local area."*

The Transport strategy is a fluid document that evolves with the need for change and allows the council to work on projects that may come forward and gives power to lobby for change within the borough. It is supported by other policies and works with the Local Development Framework to help bring change and progression to the transport network. Rochdale BC works with TfGM and Your Trust Rochdale to promote active travel schemes to workplaces, schools and the public. Your Trust actively promotes walking, cycling and wheeling across Rochdale with access to maps and routes. Child and adult cycling lessons are available, as well as bike libraries, access to discounted bicycles, and 'snail trails,' organised walks of about 1 mile for children aged 18 months to 5 years.

AQAP 1.7 Taxi and Private Hire

Throughout 2024, Rochdale BC has been working with partners in the GMCA to support the Clean Air Plan. We worked closely with taxi and private hire trade members affected by the proposals in relation to the Clean Taxi Fund, as part of the measures to improve air quality across the borough and Greater Manchester region. Rochdale BC has been working on developing emission standards and linking in with taxi licencing conditions for the minimum licencing standard requirements proposed as part of the Clean Air Plan.

AQAP 1.8 Green Infrastructure

Rochdale BC works with City of Trees to encourage tree planting across the borough. Over 5646 trees have been planted in 12 months on a mixture of public and private land and included two lengths of native hedgerow planted in more the rural areas of Heywood and Norden. In addition, large numbers of trees were planted around Hollingworth Lake, Littleborough. Staff were allowed time to plant trees to encourage project engagement. Areas for additional tree and hedgerow planting have been identified, with plans to continue the scheme.

Hedge planting was undertaken at schools, including Crossgates in Milnrow, Middleton Parish and St Johns in Rochdale, and trees have been planted at local schools including:

- All Saints CE Primary School, Rochdale
- Ashfield Valley Primary School, Rochdale
- Bowlee Park Community Primary School, Langley
- Broadfield Community Primary School, Rochdale
- Castleton Primary School, Castleton
- Crossgates Primary School, Milnrow
- Greenbank Primary School, Rochdale
- Healey Foundation Primary School, Rochdale
- Middleton Parish CE Primary School, Middleton
- St John's RC Primary School, Rochdale
- St Luke's CE Primary School, Heywood
- St Margaret's CE Primary School, Heywood
- St Mary's CE Primary School, Balderstone
- St Mary's RC Primary School, Langley
- St Peter's RC Primary School, Middleton
- St Thomas' CE Primary School, Newhey
- Shawclough Community Primary School, Shawclough
- Smithy Bridge Foundation Primary School, Littleborough
- Stansfield Hall CE/Free Church Primary School, Littleborough.

2.2.6.2 Freight & Heavy Goods Vehicles

AQAP 2.7 – Engine Idling

The creation of the new link road from M62 to Heywood has improved traffic flow of HGV and LGV movements through Heywood Town centre, improving connectivity for the businesses in the South Heywood area.

Rochdale BC has worked alongside partners to reduce engine idling around schools and is looking to introduce School Streets in a pilot area. Working with schools and the Council highways department, work has been undertaken to find schools which would benefit most, alongside other traffic calming measures and parking restrictions.

2.2.6.3 Buses

AQAP 3.4 – Trial of Low-Emission Vehicles

Tranche 2 of bus franchising came into operation in March 2024, and 50 additional zero exhaust emission buses came into operation across Rochdale, Oldham and Bury with a

number of these operating within Rochdale. The electrification of Middleton and Rochdale Bus stations allow the buses to work efficiently across the network. 21 new Euro 6 buses were also added to the network.

2.2.6.4 Cycling

AQAP 4.1 – Cycle Programmes

Work with Rochdale Council and Your Trust is ongoing to provide access to bicycles, adult and child cycling lessons and bicycle maintenance.

Phase 1 of the Living Streets project in Castleton was completed, part of a Bee Network project, it has enabled additional cycling, walking and wheeling access in the area. Phase 2 will commence in 2025 and will connect Manchester Road to Rochdale town centre. It aims to make it safer and easier to get around, boost public health, and upgrade public spaces while reducing traffic and flood risks. The project from Castleton Railway station to Manchester Road created a designated cycle path, footpaths, crossing points, a new car park and a community play park. This Bee Network Scheme was designed to Streets for All Design Guide specification. Phase 2 will include:

- New landscaping, planting and opportunities for people to help plant landscaped areas
- Improved footpaths and cycle lanes
- New crossings at major junctions
- Road resurfacing
- Traffic calming measures on quiet streets to improve the safety and experience of all road users
- New benches and seating
- Replacing the New Barn Lane subway with a new road crossing.

2.2.6.7 Information & Resources

AQAP 7.9 – Awareness Raising

Rochdale Council's Climate Change Strategy and Delivery Plan have been developed with the Climate Emergency Working Group and identifies measures required to attain environmental sustainability. The strategy includes:

- Overview of the climate crisis and sustainability
- National and regional climate change policy position
- Climate emergency in Rochdale
- Sustainable development goals
- Collaborative action
- Council responsibilities

- Resources
- Governance
- Engagement and communications.

As part of the Council's commitment to air quality, climate change and achieving the goal of becoming carbon neutral by 2038, training opportunities have been available to all staff members to increase awareness and knowledge on issues affecting the environment, including Carbon Literacy training and Climate Conversations. The council actively supports and engages with staff to promote sustainability, recycling and active travel as part of the Climate Action campaign.

Rochdale BC is also continuing to support and promote the council run Eco-Business scheme which offers businesses the opportunity to pledge to become more environmentally sustainable. This encourages the use of low energy appliances/lighting, using eco-friendly cleaning products and recycling, alongside other pledges.

2.2.7 Progress on actions for Salford City Council

2.2.7.1 Development Control and Planning Regulation

AQAP 1.1 & 1.2 – Construction Management Guidance & Development Planning Guidance

Salford [Local Plan policy PH1: Pollution control \(link in text\)](#) sets out the local approach to the relationship between planning and air quality, and requires new developments to minimise and mitigate pollution during both the construction and operational phases of development. An online planning application [Validation Checklist \(link in text\)](#) has been developed to replicate criteria used in the IAQM/EPUK guidance as to when an air quality assessment may be necessary. The Salford City Council (SCC) environmental consultant team recommend that baseline good design standards from the IAQM/EPUK guidance should be adopted for major developments. IAQM/EPUK guidance is being incorporated into planning decisions.

On major developments, a condition would normally be placed on the application to include where appropriate:

- Construction Environmental Management Plan, which would include measures to prevent the deposition of dirt on the public highway and measures to control the emission of dust and dirt during demolition/construction.
- Travel plan

- Damage cost calculation, to determine a proportionate financial contribution towards, or provision of, additional mitigation (e.g. for developments in areas where there is cumulative impact or where a significant air quality impact is likely).

The adoption of Local Plan Policy A10 ([Link to Salford Local Plan](#)) requires the provision of Electric Vehicle Charging Points. The standard of provision equals or exceeds the IAQM/EPUK guidance.

AQAP 1.6 – Encouraging Travel Planning

Travel plans for certain developments are required to be submitted as part of the planning application process. An online planning application [Validation Checklist \(link in text\)](#) has been developed to bring it up to date and in line with changes to national and local planning policies, to show commitment to providing sustainable travel options with a view to reducing unsustainable modes of transport.

The Walkden Park & Ride scheme opened to the public in September 2023. This has provided 109 car parking spaces, including 8 disabled spaces and 2 EV bays. Motorcycle parking and a secure cycle hub (24 secured by card access and 8 publicly available spaces) were also provided for commuters.

AQAP 1.7 – Taxi & Private Hire Licensing

Between 2018-2021, Salford Licensing worked with other GM Licensing Services, with support from TfGM, to develop GM Minimum Licensing Standards (MLS) for Taxis and PHVs. These standards were adopted by Salford, which included:

- All new licenses are required to have Clean Air Zone compliant vehicles.
- All existing licenses are required to have Clean Air Zone compliant vehicles attached to them by 1 April 2024.
- PHVs age limit: Newly licensed: Under 5 years old; Existing licenses: Less than 10 years old.
- PHVs (Wheelchair Accessible) age limit: Newly licensed: Under 7 years old; Existing licenses: Less than 15 years old.
- Purpose built Hackney Carriage Vehicle age limit: Newly licensed: Under 7 years old; Existing licenses: Less than 15 years old.

Whilst these standards were adopted in Salford, they were not adopted by all Greater Manchester local authorities in their entirety, and some authorities that did adopt have since revised their policies away from the standards. Salford may also revise some aspects that do not relate to vehicle emission standards. As such, whilst elements of MLS have achieved GM wide consistency, other elements, including vehicle related

standards have not. GM Licensing Services continue to work closely together, including discussion of policy positions.

Since the review of the earlier GM Clean Air Plan, in collaboration across GM, Salford has revised the date for which all existing licensed vehicles must meet the emissions criteria to 31 December 2025. This is on the provision that the funding support within the CAP proposal is approved.

AQAP 1.8 – Green Infrastructure

- In October 2024, SCC pledged to support the planting of 8,000 trees by 2028. The council will work with the Greater Manchester community forest and charity, City of Trees, to identify planting sites for street trees and new woodland areas.
- The City Council will continue to work with developers in the planning process to plant new trees as part of new developments. Salford Local Plan policy GI1 sets out the overarching local approach to protecting and enhancing the green infrastructure network in Salford. Specific Local Plan policies are also in place to protect and enhance strategic green infrastructure in Salford, Chat Moss (a lowland raised bog providing an important carbon sink and a biodiversity heartland); Irwell Valley (home to a varied range of environmental and historic assets); West Salford Greenway (containing conservation areas and strategic recreation routes); Local Green Space and Trees; and woodland and hedgerows.

2.2.7.2 Freight & Heavy Goods Vehicles

AQAP 2.7 – Engine Idling

- Salford City Council continues to have regard for the report 'Tackling Vehicle Idling – Options' produced by the Greater Manchester Air Quality Working Group in 2022, that set out options for enforcement of idling vehicles and raising awareness of the issue. In 2024, four complaints were received by the City Council relating to idling vehicles around schools. In accordance with our enforcement policy, these were resolved informally by providing appropriate advice and guidance to raise awareness of air pollution and practical ways to involve teachers, parents and pupils to reduce vehicle idling and improve air quality.
- Anti-idling social media messages were promoted by Salford City Council in June 2024 as part of a national Clean Air Day campaign.

AQAP 2.8 – Alternative Fuels

The City Council has recently purchased an electric tipper truck, used to empty litter bins and remove street & fly tipped rubbish. It joins the fleet of electric vans purchased in

2020, used by the council's facilities, pest control, trading standards and waste and recycling teams, in helping to improve air quality in the city. There are now 19 electric vehicles in the Council's fleet.

To support the electric vehicles, associated charging facilities have been installed at the City Council Turnpike Depot. The depot carports house 1,145 solar panels, which can generate over 411,288 kWh of electricity each year. This will be used by council and NHS offices, with the remaining electricity being exported to the grid.

A DfT e-scooter trial started at the University of Salford Peel Park and Fredrick Road campuses in October 2020. Subsequent extensions were:

- A route to Media City UK in November 2020
- A further phase covering Ordsall and the City Centre in April 2021.
- A further expansion to connect Salford Royal Hospital in winter 2021.
- An expansion to include parts of Pendleton and Weaste in 2022
- An extension to Eccles and Patricroft in 2024

A re-procurement exercise was undertaken in 2024 to test the market and ensure that we had the best provider to cover the extended trial period recently authorised by the DfT until May 2026. Three providers were shortlisted, and Lime were reappointed. Extending the operational area to Swinton Town Centre is currently being considered. Initially 200 e-scooters were deployed, this has now grown to 300 with the expansion to Salford Royal Hospital and Pendleton. Scooters are monitored for usage and trip destinations. On a monthly basis, the total mileage of the e-scooter fleet is over 44,500.

The trial has been successful with over 1.4 million trips and 2.35 million km ridden since launch. The trial is providing a valuable first/last mile option for users.

A lot of interest has been shown in e-scooters, and it is hoped that this will shift more short journeys from cars to e-scooters. While the trial is ongoing, work will continue with DfT to look at whether e-scooters can be legalised to provide an alternative to car use and a greener mode of travel for short journeys. Further information is available from the City Council website [e-Scooter trial page \(link in text\)](#).

2.2.7.4 Cycling

AQAP 4.1 – Cycling Programmes

The City Council is continuing to expand its network of on and off-road routes with several new cycle routes recently completed in and around Salford. The most recently completed route is:

- Irwell St – Improved public realm, crossing facilities and short n/bound cycle lane between Stanley St and Trinity Way to improve access to the new Eden office development.

Funding has been secured to deliver the following routes in 2025/26. Works are expected to start on Chapel Street East/New bailey in the spring of 2025:

- Oldfield Road – Provision of segregated cycle routes connecting Chapel Street to Regent Road via Oldfield Rd.
- Chapel Street East Phase 1 – Provision of segregated cycle tracks.
- Islington Neighbourhood. Improvement to public realm/walking and cycling. Expected to start summer 2025.

More routes are being planned and developed and are outlined on [this link to the City Council Cycling and Walking webpages](#).

AQAP 4.2 – Public Cycle Hire

Salford City Council have worked with Beryl, TfGM, Manchester City Council & Trafford Council to provide a public cycle hire scheme. This was launched within selected locations in Salford in November 2021. The scheme has rolled out to further parts of Salford and covers parts of Manchester and Trafford. The cycle hire scheme provides a low-cost form of transport for users travelling within Salford, Manchester and Trafford. The scheme has suffered from issues of vandalism and low usage, which led to some locations being suspended during 2023. These problems are being tackled as part of a TfGM plan, and some sites have since reopened.

The scheme has been branded as the Starling Bank Bike scheme. Further information on the cycle hire scheme is available from [this link to the public cycle hire webpage](#).

AQAP 4.3 – Cycle Logistics

A 'bike library' providing eCargo bike hire for businesses to make sustainable deliveries is operational and managed by Manchester Bikes of Chapel St on behalf of the City Council. A number of small businesses and large organisations have received eCargo bikes as direct loans to use for their business travel.

The original funding via the Energy Savings Trust has now finished, but Manchester Bikes continue to operate, and usage is being monitored to increase uptake amongst local businesses.

2.2.7.5 Travel Choices

AQAP 5.1 – Car Clubs

The Salford Co-Wheels car club covers 8 sites across the city with a total of 22 vehicles, including 4 fully electric vehicles and 8 hybrid vehicles. Data for the car club has been collected and shared with TfGM. Data includes mileage, trip data, fleet make up data etc. As part of a Business Travel Review, the utilisation of Co-Wheels vehicles has been undertaken to inform the number of vehicles that we would need for a retender. The procurement specification is being drawn up for Procurement Board in March 2025.

2.2.7.6 Cars

AQAP 6.1 – Plugged-in Places EV Charging Network

Conditions are applied to all planning applications where an air quality assessment is necessary, requiring Type 2 charging facilities on all properties with dedicated off-road parking, and a proportion of spaces (to be agreed) for apartments/high rise. Planning conditions are applied requiring fast or rapid charging for retail floorspace in accordance with Salford Local Plan Policy A10. This policy is more stringent than electric vehicle charging provision standards suggested by IAQM/EPUK guidance.

EV charging infrastructure requirements for new buildings and buildings undergoing major renovations are specified in Building Regulations ([Link to Approved Document S](#)), which took effect in June 2022. Local plan EV charging point standards will be superseded by any higher standards introduced through the Building Regulations.

As part of the GM Clean Air Plan proposals, 28-30 taxi only rapid charge points are to be installed across Greater Manchester tailored to locations to support zero exhaust emission capable taxis to operate across GM. EV chargers for taxi's have been successfully installed at Church St car park Swinton, Hankinson Way, Pendleton and John William St, Eccles. Usage remains limited, but TfGM are working to identify how this can be increased.

Locations of publicly accessible charging points are available via the [Zap Map website](#).

AQAP 6.2 – Car Use Allowance

Salford City Council has transitioned to a hybrid way of working, underpinned by a digital first approach to reduce the overall need for business travel. A flexible travel hierarchy has been introduced to allow managers and employees to make informed decisions on the most efficient, effective & sustainable ways for business travel to achieve the best outcomes:

1. Digital first approach - Can outcomes be achieved without the need to travel using online collaboration tools?
2. Walking and cycling - for short journeys.

3. Public transport - for longer journeys on major routes and rail for out of area long journeys.
4. Car hire - for long journeys or out of area journeys not easily accessible by public transport.
5. Co-Wheels car club vehicles - first choice for most business trips by car, with preference for using an electric or hybrid vehicle.
6. Private vehicle - As a last resort where circumstances mean it is more efficient and effective. In these circumstances casual mileage car use allowance can be claimed, based on the journey beginning and ending at an administrative base.

On site active travel facilities e.g. bike shelters, lockers and shower facilities are available at various City Council buildings and Gateway centres to encourage active travel.

AQAP 6.3 – Local Authority Parking Charges

A digital car parking permit scheme is currently in place at the principal city council office and depot locations. Specific parking spaces are allocated for pool vehicles, electric vehicles and car share vehicles at Salford Civic Centre to encourage their use. Car parks are regularly patrolled by Parking Wardens; a Penalty Charge Notice may be issued for vehicles that have not been issued with a permit.

AQAP 6.4 – School Travel

Salford City Council have membership to Modeshift STARS, a national organisation and software that allows users to engage with schools on a largescale. Schools can receive awards and accreditation for their Travel Plan work. Work is ongoing to engage with these schools and contact other schools to get more signed up.

Salford City Council work with Living Streets and other organisations to promote active travel and reduce journeys by car to schools. Several schools are signed up to Living Streets' WOW Walk Once a Week.

Salford City Council has identified a set of school streets criteria to determine suitable schools. A school street has been implemented at Godfrey Ermen, Eccles, and there are plans for additional schools to be operated using ANPR. TfGM have funding available for districts to develop schemes, and SCC is working through an application for this.

The Clean Air GM website includes a [schools toolkit \(link in text\)](#) to raise awareness of air pollution and practical ways to involve teachers, parents and pupils in improving air quality. This is promoted on the City Council website air quality pages and in response to complaints about vehicle idling near schools.

2.2.7.7 Information & Resources

AQAP 7.3 – Air Pollution Alert

The Greater Manchester Air Quality Alerts service is being promoted via the Salford City Council website air quality pages.

AQAP 7.9 – Awareness Raising

The City Council website air quality and smoke control pages are reviewed and updated regularly. These aim to raise awareness and provide guidance regarding the role stakeholders can play in improving air quality.

Social media campaigns to raise public awareness of the Greater Manchester Clean Air Plan proposals have continued during 2024. Social media campaigns on raising awareness of smoke control area rules, using wood burning stoves correctly and awareness of garden bonfire issues were carried out in the winters of 2023 and 2024.

In June 2024, as part of a national Clean Air Day, a social media campaign was conducted to raise awareness of air quality issues and active travel measures to reduce air pollution.

In December 2024, Environmental Protection Officers gave a presentation to Salford local councillors and lead members on local air quality to raise awareness of local issues and the role and responsibilities of the local authority.

The City Council investigated 81 complaints related to smoke nuisance and 9 complaints related to dust nuisance in 2024. Smoke complaints received were related to domestic burning (e.g. garden bonfires) (60%), smoke from commercial premises (32%) and smoke from domestic chimneys (7%). Dust complaints received were related to construction/demolition (67%) and commercial industrial sites (33%). Contact was made with the complainant and in some cases the alleged source; therefore, this will have a beneficial effect on raising awareness of local air quality issues and reducing air pollution.

2.2.8 Progress on actions for Stockport Metropolitan Borough Council

2.2.8.1 Development Control and Planning Regulation

In 2024, Stockport Council's Environmental Regulation team reviewed a significant number of planning applications for new developments within Stockport. Over 70 applications were reviewed in relation to potential air quality impacts from new developments including the construction and demolition phases.

Applications received include developments for small, medium and large residential, commercial and industrial installations. Planning applications are reviewed to assess potential impacts of new developments on local air quality including the Stockport Air Quality Management Area but also locations that are included within the GM Clean Air

Plan (projected exceedances of legal limits for nitrogen dioxide). Planning applications are also reviewed for impacts of bringing sensitive receptors to locations where levels of nitrogen dioxide exceed or are close to exceeding legal limit values.

AQAP 1.1 – Construction Management Guidance

Planning applications are reviewed and checked utilising guidance contained within the Institute of Air Quality Management guidance note: 'Planning for Air Quality.'

Construction and demolition work can cause short and long-term impact on particulate levels in areas close to development. The Environmental Regulation team impose suitable planning conditions in relation to construction management plans which are used to control impacts from construction and demolition on local air quality. The Council's Neighbourhoods team respond to complaints regarding dust/smoke and pollution complaints regarding construction and demolition sites.

AQAP 1.2 – Development Planning Guidance

In 2024, the Council's planning application validation checklist was updated, and the following guidance is provided to applicants confirming when an air quality assessment is required:

Where the proposal may potentially have a significant impact on air quality either by emitting air quality pollutants (including during construction and demolition phases) or by introducing receptors to areas where there are existing sources of air quality pollutants and will include:

- All major development.
- Proposals that could result in significant vehicle movements through the Stockport Air Quality Management Area
- Proposals that include potentially air pollution generating uses or combustion-based technologies.
- Proposals incorporating sensitive uses; and
- Developments that create new residential units within the Stockport Air Quality Management Area.

Further to this guidance for applicants, planning applications are reviewed to assess potential impacts of new developments on local air quality. Council officers undertake technical reviews of submitted air quality assessments and supporting transport assessments to confirm potential impacts of development on local air quality and sensitive receptors.

AQAP 1.5 – 20 mph Zones

In February 2024, Stockport agreed updated guidance on how they would roll out 20 mph limits and zones. The aim being to support residential streets in being 20 mph and that the focus of delivery of new 20 mph locations would be around new sustainable transport infrastructure delivered to Bee Network Standards. Also, new planning applications for residential estates are to expect the application of 20 mph limits on those new streets as standard, with exceptions by negotiation.

AQAP 1.6 – Encouraging Travel Planning

Stockport has continued to work with TfGM and businesses/developers via the Travel Plan Toolkit.

Stockport continues the process of reviewing its Local Plan, including identifying the best way to integrate new transport developments such as EV Charging and Car Share into the Councils planning policies and guidance. This is separate to Places for Everyone. The Local Plan is being supported by an updated Stockport Transport Plan which will identify the key transport priorities in the borough to support Our Local Borough Plan and the Local Plan.

The guidance note on the delivery of EV in new developments continues to support the promotion of adequate charging and Zero-Emission Vehicle Charging Infrastructure. An interim policy statement which clarifies the aims of the borough regarding delivery of supporting infrastructure for the changing car market is being utilised to support actions regarding EV.

The Council require applications for development which are likely to have significant or specific transport implications to be supported by a Travel Plan or Travel Plan Statement. These plans will detail the measures to be implemented to encourage and allow staff and visitors to travel to the site in a more environmentally sustainable manner, improve safety, reduce the impact of the development on the local highway network, reduce car parking demand and deal with freight movements so that environmental impacts are minimised.

AQAP 1.7 – Taxi & Private Hire Licensing

In February 2024, Stockport Council adopted standards which aligned with Stage 2 of the Greater Manchester Minimum Licensing Standards. Thus, new to licence vehicles are required to meet the minimum vehicle emission standard of Euro 4 petrol or Euro 6 diesel. This approach allows for the control of the number of non-compliant vehicles coming onto the licensed fleet, whilst allowing a transitional period for existing licensees to comply with the standard by the 31 December 2025. This will align itself with the needs of any funding for Taxis in the Clean Air Plan for Greater Manchester. Stockport

continues to work with the wider GM Boroughs to improve taxi and private hire standards.

AQAP 1.8 – Green Infrastructure

Stockport has a 2 for 1 expectation when replacing trees which have needed to be removed. This can be seen in action on the Stockport Interchange project which resulted in the planting of 95 new trees in the new park and approximately 400 more across the wider development and town centre.

Stockport is a green borough, and the continued planting of new green infrastructure is part of maintaining this. 1,153 trees and 600 fruit trees were planted between December 2023 – March 2024 which has helped towards targets on tree planting for individual tree planting and orchards. One new wildflower meadow has been created this year alongside the new orchards. Stockport Council have run Orchard Mentor training for residents for the third year running, with plans to run the project for the remaining 7 years of the 10-year plan. The borough has continued to include funding for tree planting in the Transport Capital programme as part of its commitment to the provision of highway trees.

2.2.8.2 Freight & Heavy Goods Vehicles

AQAP 2.7 – Engine Idling

Work is continuing to encourage vehicles not to be left idling when parked. The focus for this is around education locations with the turn it off campaign, where banners around schools are put up to encourage engines to be switched off. The message has been promotion using Council social media accounts and information was issued in a press release to local media. Stockport has also promoted this message as part of the School Streets locations.

AQAP 2.8 – Alternative Fuels

Stockport continues working with the other GM boroughs on the Clean Air Plan which included work to encourage upgrades to less polluting vehicles. This is supported by work to increase EV charging infrastructure in partnership with the private sector.

Over 2023-24, Totally Local Company (TLC, who provide the Council's fleet) have continued to work on reducing the greenhouse gas emissions of their operations, with work taking place around the vehicle fleet and the operating site at Endeavour House. At strategic level a report, commissioned from Logistics UK, reviewing how the vehicle fleet could be decarbonised was delivered, the recommendations will form the basis of TLC's vehicle procurement strategy moving forward.

TRAILAR solar panels are in use on six refuse trucks, directly leading to the saving of 1,546 litres of diesel over the year, equating to a reduction of four tonnes of CO₂ and

corresponding NO₂ reductions. Going forward, all suitable vehicles procured will be fitted with the same system to ensure emissions are minimised.

Procurement of a new electric road sweeping vehicle is the first step in bringing in alternative fuel vehicles as they become available across all vehicle types operated.

2.2.8.3 Buses

AQAP 3.2 – Bus Improvements

Now part of the Bee Network in the third and final tranche of bus franchising, Stockport continues to support the work of TfGM to access funding to replace buses in the borough's fleet and reduce the impact on air quality in Stockport.

The Stockport Interchange and Viaduct Park on its roof were successfully opened alongside the improved connection to the railway station for both pedestrians and cyclists. This provides connectivity between bus and rail for passengers and improves the ease and attractiveness of public transport. The walking and cycling connections increase the connectivity of different areas of the Town Centre and the Trans Pennine Trail route through the Town Centre.

2.2.8.4 Cycling

AQAP 4.1 – Cycling Programmes

Stockport is continuing to deliver activation activities for walking and cycling improvements, including for the new cycling and walking routes over the interchange which link the town centre to the Trans Pennine trail and the railway station. These activities include led walks and cycle rides, as well as bicycle maintenance and opportunities to try accessible bikes. The borough continues to deliver cycle schemes, including new crossing points at major severances such as the A6 and developing the next section of the Heaton cycle link on Heaton Mersey common. A comprehensive annual review of cycling and walking improvements in Stockport Borough can be found via [this link to the Walking and Cycling Update Report](#).

AQAP 4.2 – Public Cycle Hire

Stockport continues to be open to discussions with TfGM regarding the expansion of cycle hire into the borough as part of the Bee Network. Stockport has also encouraged groups who have expressed interest in developing their own bike hire schemes (bike libraries) to apply for any available funding that existed.

2.2.8.5 Travel Choices

AQAP 5.1 – Car Clubs

All casual car users have continued to be offered access to the Car Club for work trips. The Stockport Staff Travel Plan and Guidance on Car Club usage are based on a hierarchy of travel types in which single occupancy vehicle use is the last option, the encouragement of this is returning following the pandemic. The public use of Car Club vehicles continues to be promoted, and new developments in the borough are encouraged to look for opportunities to provide Car Clubs in their developments.

2.2.8.6 Cars

AQAP 6.1 – Plugged-in Places EV Charging Network

Stockport continues to support the work being undertaken by TfGM to address the need to reduce the pollution caused by vehicles. Beyond the Be.EV network support already identified; this includes working with a private supplier to address the need to expand the public charging network. This has resulted in the following bays being implemented:

- Romiley Precinct Car Park (4 off-street bays)
- Church Road, Gatley (4 off-street bays)
- Ashbrook Lane, Reddish (4 off-street bays)
- Commercial Road East Car Park, Hazel Grove (4 off-street bays)

A further 5 locations are to be delivered in the coming year (2025/26), and Stockport is committed to being part of the Local Electric Vehicle Infrastructure fund through TfGM.

AQAP 6.2 – Car Use Allowance

The council offers a car use allowance for essential car users and a payment for fuel based on mileage for essential and casual car users who must use their vehicles for work. Cyclists choosing to use their own bicycle can reclaim a mileage contribution through the council's reimbursement scheme. The council continues to offer salary sacrifice options for bus and rail season tickets. There is also a selection of pool bicycles that can be borrowed for staff use, along with necessary safety equipment. These include electric bikes for less able users and longer trips.

AQAP 6.3 – Local Authority Parking Charges

Following the pandemic and changes in working locations with a greater move to working from home, staff parking in the Civic Complex is charged via a mobile payment app provided by Ringo. The Council continues to offer permits for low and zero exhaust emission vehicles to park cheaply across the borough to encourage uptake of these technologies. A loading facility for staff, who are only at the office to access equipment, has also been provided to support journeys. The use of the council car park by staff now requires that, along with payment, a correct parking permit is displayed in vehicle

windows. To enable those that are most in need to park at the civic complex, a nearby town centre car park is available to provide parking for staff.

AQAP 6.4 – School Travel

Stockport has continued to work with colleagues in education to develop travel plans with regards to schools and other education facilities when they submit planning applications. Bikeability training continues to be delivered at all schools who accept the offer. The Council has continued to deliver school streets, where four schools have permanent Traffic Regulation and are anticipated to receive further signage to support the closures in the coming year. Stockport is also expecting to bid for funding to support the development of new schemes in the borough in 2025.

2.2.8.7 Information & Resources

AQAP 7.9 – Awareness Raising

Stockport has continued to promote the use of sustainable modes of travel during the last year and encouraged walking and cycling via social media. This has included activation work completed schemes such as the provision of Bike Doctor events and cycle training in locations where new routes have been completed. Stockport also held its Fourth Summer Weekend event called Stockport Moves that included Cycling and Walking events and activities. The finale to the Stockport Town of culture year event also had elements promoting the use of sustainable travel. Stockport also continues to support walking groups through wellbeing walks (formally health walks) and confidence walks, designed to build people's ability to walk increased distances in a safe environment, facilitating walking as a preferable mode of transport in the future. The council website contains information on a wide range of topics related to air quality and active travel:

The page on pollution (<https://www.stockport.gov.uk/pollution>) includes information on:

- Open fires and wood burning stoves – further supported by the council's social media channels, part of a wider GM campaign, to promote responsible use of solid fuel burners within Stockport.
- Air quality monitoring data

The page on Travel (<https://www.stockport.gov.uk/topic/travel>) includes information on:

- Cycling and Walking in the Borough
- Public Transport

2.2.9 Progress on actions for Tameside Metropolitan Borough Council

2.2.9.1 Development Control and Planning Regulation

AQAP 1.1 – Construction Management Guidance

Where planning applications are received for developments which involve a substantial amount of building work, conditions are imposed requiring the submission and implementation of a construction management plan in line with the latest IAQM guidance. The construction management plans require measures to reduce emissions from the building works, including measures such as wheel cleaning/wheel washes, damping down of haul roads and stockpiles, and inspections off-site to ensure that there are no visible emissions from the site.

AQAP 1.2 – Development Planning Guidance

Tameside Council requires air quality assessments for larger planning applications in line with the latest IAQM guidance. Even where the air quality impact is assessed as negligible, mitigation is requested, including measures such as electric vehicle charging provision where parking is provided.

AQAP 1.6 – Encouraging Travel Planning

Conditions are imposed on major planning applications requiring the implementation of travel plans. The types of development that would require travel plans include schools, industrial estates and some residential developments.

Tameside continues to engage with TfGM Travel Choices and Active Travel Teams to promote active travel, travel choice programmes and journey planning across Tameside.

AQAP 1.7 – Taxi & Private Hire Licensing

Tameside operates an age restriction on Hackney and Private Hire vehicles registering for new licenses. All vehicles obtaining a new license must meet Euro 6 emission standards.

2.2.9.2 Freight & Heavy Goods Vehicles

AQAP 2.7 – Engine Idling

The council continues to have regard to the anti-idling options report previously produced for GM AQ officers and continues to seek to resolve any issues informally and via an education and awareness-raising approach.

2.2.9.3 Buses

AQAP 3.1 – Bus Priority Programmes

Ashton to Stockport. TfGM are developing more detailed proposals and a programme for submission of an outline business case. An initial design is being prepared for a new pedestrian crossing. The design will be reviewed and developed further by TfGM. Ashton, Oldham and Rochdale. TfGM have prepared a brief for the next stage of design development. Discussions are ongoing around procurement of a consultant to complete the work. It comprises three separate schemes, a bus lane extension, an off highway shared use path and provision of segregated cycle facilities, and a new signalised crossing.

2.2.9.4 Cycling

AQAP 4.1 – Cycling Programmes

The council operates a borrow a bike scheme, allowing all staff from the council, Tameside and Glossop Clinical Commissioning Group, Greater Manchester Pension Fund and contracted consultants access to a bike for business and personal use for up to two weeks at a time.

Additionally, the council also has a Cycle to Work salary sacrifice scheme, offering all employees and Elected Members the opportunity to save money on the hire of a bike and accessories, up to the value of £5,000.

Cycle lane upgrade work is substantially complete on Stockport Road and Oldham Road/Newman Street. Some resurfacing work is required on Guide Lane to resolve paving defects and to enable road markings to be completed. A revised scope of resurfacing work is being finalised to bring the forecast costs within the scheme budget and is anticipated to be completed in spring 2025. A schedule of snagging work remaining is being agreed and is forecast to be completed by March 2025.

2.2.9.5 Travel Choices

As part of the Active Neighbourhoods initiative, Tameside Council introduced a resident led “Quiet Streets” scheme giving pedestrian and cycle only access to designated routes. Work on the design and implementation of eight walking and cycling routes across the borough has progressed.

- Rayner Lane, Droylsden and Audenshaw – improved off-highway cycle and pedestrian route between the Ashton Moss Metrolink stop on Lord Sheldon Way and Heron Drive and a cycle/pedestrian route on the Audenshaw old railway line via filtered access points. This is part of the same scheme as Stamford Drive below (Active Neighbourhoods Phase 2). Works are progressing well and are due to be completed by the end of March 2025.

- Stamford Drive to Granville Street, Stalybridge and Ashton – as above. The Stamford Drive to Granville Street scheme was substantially completed in January 2025 and there is now some snagging work to be completed in the next month. It aims to improve the environment for neighbourhoods south of A635 Stamford Street between Ashton and Stalybridge, to reduce the volume and speed of vehicles on the residential streets, where a significant number of vehicles currently reroute to avoid queues on the main road. It also aims to promote cycling by providing safe crossings and a direct quiet route.
- A57 Crown Point, Denton – ongoing discussions regarding scope. A new proposal was submitted to TfGM in February 2025 and is currently awaiting review by Active Travel England.
- Albion Way/Wellington Road, Ashton – revised proposal submitted to TfGM in February 2025, and a reviewed Strategic Case is currently being put together.

AQAP 5.2 – Dynamic Road Network Efficiency and Travel Information Systems

Bee Network Crossings

- A627 Cavendish Street crossing – Tameside Council works are now complete. A Road Safety Audit (RSA) has been completed. Work is now underway to complete the works arising from the RSA. Due to be completed in March 2025.

CRSTS (City Regional Sustainable Transport Settlement)

- A560 Stockport Rd Hattersley Viaduct – awaiting signing of the Funding Agreement to drawdown to submit Full Business Case.

Active Travel Funding

- The objectives of Active Travel Fund phase 2 programme are to help create an environment that is safe and attractive for both walking and cycling to replace journeys previously made by car and public transport. Longer term the plans will also help to deliver significant health, environment and congestion benefits by contributing to the development and roll out of the Bee Network.
- Ladbroke Road – To develop a new pedestrian crossing proposal on Ladbroke Road in Ashton-under-Lyne. This will include a public consultation exercise and develop the required business case submission.
- Stamford Street/Clarence Street – This is to support TfGM in developing a proposal to accommodate controlled pedestrian crossings as part of the signalised junction at Stamford Street/Clarence Street. This will include a public consultation exercise and develop the required business case submission.

- Walking and Wheeling at Signalised Junctions – work was completed in December 2024 to install signalised pedestrian facilities at Tame St/High St, Stalybridge and Edge Lane/North Rd, Droylsden.

2.2.9.7 Information & Resources

AQAP 7.1 – Website and Online Resources

The Council has promoted walking and cycling routes and green space use across the borough including links to the GMWalking website. The website also hosts information around Local Air Quality Management, Smoke Control Areas and the burning of waste.

AQAP 7.9 – Awareness Raising

Greater Manchester-wide awareness raising campaigns have been run on the council's social media accounts around the environmental impact of bonfires and burning waste and the correct use of wood burning stoves.

2.2.10 Progress on actions for Trafford Metropolitan Borough Council

2.2.10.1 Development Control and Planning Regulation

AQAP 1.1 – Construction Management Guidance

In 2024, the council's Pollution team reviewed 9,636 planning applications within Trafford, with 115 of these reviewed in relation to potential air quality impacts. A further four enquiries were received from consultants relating to undertake Air Quality Assessments within the Trafford area.

Applications received include developments for small, medium and large residential, commercial and industrial installations. Planning applications are reviewed to assess potential impacts of new developments on local air quality including the Trafford Air Quality Management Area and locations that are included within the GM Clean Air Plan (projected exceedances of legal limits for nitrogen dioxide). Planning applications are reviewed for impacts of bringing sensitive receptors to locations where levels of nitrogen dioxide exceed or are close to exceeding legal limit values.

The following developments include works to improve safety for pedestrians:

- Junction designs concluded on intersection of A56/Sinderland and A56/Barrington Road as part of Sale West to Altrincham Network Improvements including safer pedestrian crossings.
- Firsway Crossing - safer pedestrian crossing as part of Sale West to Altrincham Network Improvements.

AQAP 1.2 – Development Planning Guidance

Details of air quality requirements as part of planning applications to the council is provided in the Trafford Planning Validation Checklist. Planning conditions for installation of EV charging points in new residential and commercial installations are routinely included. The council requires applicants to provide a scheme detailing provision of low emission vehicle charging infrastructure which is subject to review and approval.

Significant applications received in 2024 in relation to air quality impacts include:

- Residential development within Air Quality Management Areas.
- Event City in Trafford Park, a wellbeing resort including logistics hub.
- HS2.
- Small energy reserve facilities.

AQAP 1.5 – 20 mph Zones

Trafford currently has 26 existing 20 mph zones. The schemes were implemented in the 1990's following the council being in receipt of government funding relating to local road safety schemes, and as part traffic calming schemes introduced across the borough.

The One Trafford Partnership have developed a priority matrix to manage requests received via members of the public. The matrix consists of weighted questions that provide a score which will be used to prioritise the request. The matrix ensures that requests are treated in a fair and equitable manner. It will also be used to generate a cost estimate of the scheme, as cost will vary depending on the size of the area etc.

AQAP 1.6 – Encouraging Travel Planning

Under the Council's Planning Application Validation Process, guidance is provided to applicants and developers as to when sustainable plans will be required. This is dependent upon the size and type of the development. Travel plans are reviewed and conditions imposed to ensure suitable provisions are made.

AQAP 1.8 – Green Infrastructure

In 2024, Trafford planted 257 standard trees across parks and open spaces as part of our collaborative work with our partner City of Trees, a further 105 heavy standard trees were planted on the highway via our Tree Unit, giving 362 trees in total.

Trafford also planted more than 2,000 whips across various sites in Trafford as part of woodland creation initiatives with City of Trees under the Trees for Climate programme.

2.2.10.2 Freight & Heavy Goods Vehicles

AQAP 2.7 – Engine Idling

The Environmental Protection Team responded to complaints from residents and businesses relating to engine idling associated with freight and heavy good vehicles.

Officers investigated complaints and contacted businesses located within the borough where vehicles regularly leave engines idling and where drivers associated with the business have been identified as leaving engines idling for extended periods.

2.2.10.4 Cycling

AQAP 4.1 – Cycling Programmes

Trafford encourages and invests in developing a cycle network, current developments include:

- Two new Cycle Optimised Protected Signals (CYCLOPS) junctions, which fully segregates cyclists from general traffic were completed at the junction of Talbot Road/Chester Road (A56) and the junction Talbot/Great Stone Road Talbot Road funded by the Mayoral Challenge Fund.
- Kingsway Public Realm included cycling facilities outside Stretford Mall
- 80% segregated, semi-permanent cycleway both North and South bound along A56 between Junction 7 M60 and the Talbot Road/Chester Road junction.
- 5% delivery of cycle and walking facilities at three junctions along Talbot Road, i.e. Seymour Grove / Talbot Road / Chester Rd Junctions / Boyer Street.
- 90% Flixton Community Streets trial. Delivery of a Low Traffic Neighbourhood, a residential area limiting through-traffic designed to make it safer and easier to walk and cycle, as an initial phase of the Urmston Area Active Neighbourhood.
- Works are about to begin on the third junction Talbot/Great Stone Road.
- 10% delivery of a programme of 10 new bus facilities as part of Sale West to Altrincham Network Improvements.
- Development of the Bee Network Crossing scheme with new segregated cycling and walking crossing across Shaftsbury Ave and Aimson Road East.

2.2.10.5 Travel Choices

AQAP 5.1 – Car Clubs

Trafford has been working on a car club scheme with two centres, one in Altrincham on Regent Road and one at the Civic Quarter.

2.2.10.6 Cars

AQAP 6.1 – Plugged-in Places EV Charging Network

Trafford is looking to expand the borough charging network by the following means:

- LEVI – Trafford are involved in a joint bid for EV funding for on-street charging. Funding in Trafford would be around £1m and TfGM would look to appoint a Charge Point Operator to install and manage the equipment across GM.
- CRSTS – Trafford are currently applying for funding which Amey will match, again, to provide on street charging for residents. Amey would be the Charge Point Operator. This would be approximately £1m.

AQAP 6.2 – Car Use Allowance

Council staff are incentivised to use bicycles for work through provision of the cycle to work scheme and infrastructure at council buildings. Staff can claim payment for miles travelled on bicycles for work visits as an alternative to car usage.

AQAP 6.3 – Local Authority Parking Charges

Parking charges apply during operational hours including bank holidays. This also applies to parking restrictions shown on the street and in off-street car parks. Payment can be made at the machine, or cashless parking via the Ringo App. Parking is free outside of chargeable hours in Trafford car parks and for on-street parking. Blue Badge holders can park for free in designated disabled bays, some of these bays have a time limit which will be signposted, badge holders can also park for free in Pay and Display bays on street. There is no exemption for Blue Badge holders where the area is restricted to permit holders.

Electric Vehicle (EV) charging in Trafford is provided by Public EV Charging Solutions Be.EV. Parking is currently free for vehicles being charged in an EV bay; any vehicle parked in an EV bay that is not charging will be eligible for a Penalty Charge Notice.

AQAP 6.4 – School Travel

Consultation and enabling work are ongoing for to introduce 'School Streets' within Trafford, to reduce the impact of traffic at school gates creating safer environments to encourage walking and cycling. The first primary schools taking part were Flixton Primary School, Urmston Primary School and English Martyrs RC Primary School. The scheme introduces a temporary restriction on motor traffic at school drop-off and pick-up times. Temporary road closures allow parents and children the freedom to walk or cycle safely in the streets at the beginning and end of the school day, in a traffic-free environment. The street is only open to vehicles driven by residents, local businesses, and blue badge holders, meaning that children can enjoy a less polluted and less congested journey into school. It also encourages children and their parents to cycle or walk to school. Trials will now continue at each of the schools involved with the aim of making them permanent.

Data collection and resident consultation will remain a part of all future trials. Trafford has school streets running at the following schools:

- St Hugh of Lincoln, Stretford
- Seymour Park, Stretford
- Tyntesfield, Sale
- Flixton Primary
- English Martyrs
- Urmston Grammar
- Urmston Primary

2.2.10.7 Information & Resources

AQAP 7.9 – Awareness Raising

Trafford Council website provides access to resources in relation to air quality and active travel:

- Detailed online resource for cycling within Trafford.
- Engine idling information.
- Access to air quality monitoring data.
- Information and advice regarding solid fuel burning.
- The council social media channels have been used as part of a wider GM campaign to promote responsible solid fuel burning within Trafford.

2.2.11 Progress on actions for Wigan Metropolitan Borough Council

2.2.11.1 Development Control and Planning Regulation

AQAP 1.1 – Construction Management Guidance

Wigan Council has a Construction Environment Management Plan (CEMP) guidance document. CEMPs are recommended on the majority of major planning applications.

AQAP 1.2 – Development Planning Guidance

The Council's Development & Air Quality SPD was published in 2021 and is still current.

AQAP 1.6 – Encouraging Travel Planning

Travel plans are required in support of planning applications where appropriate. Wigan Council's Be Well Activation Team continue to deliver a wide range of active travel activities/programmes encouraging borough residents to travel more actively and support climate change, whilst improving their physical and mental wellbeing. Throughout 2023/2024 the team worked across education, community and workplace settings with some of the key highlights including:

- Launch of Leigh Bike Library. The library is now the largest and most successful across Greater Manchester.
- Delivery of our first Wigan Walking Festival: Big Wigan Walking Week.
- Over 1,000 free bike checks and basic repairs across School and Community settings, delivering approximately £38,000 worth of repairs.
- Establishing a partnership with British Cycling and recruiting our first Cycling Community Developer in Wigan.
- Engaging with more than 7,000 individuals in walking, wheeling and cycling activities across 175 active travel sessions.
- The introduction of Scootability training across school settings with 12 schools receiving free training and equipment as part of a successful trial.
- Engaging with 40 schools to offer active travel programmes including walking buses, litter picks, Dr Bike, scooter training, Bikeability and Bikeability balance and cycle maintenance training.
- Production of a series of self-led walking maps.
- Working closely with Be Well Cycling and Walking Teams who led around 1,500 leisure walks/rides with 15,000 attendees delivered by 60 volunteers.

AQAP 1.8 – Green Infrastructure

The Council secured funding to decarbonise Shevington Library by installing renewable energy and energy efficient technology including, solar panels, air source heat pump and LED lighting. The solar panels alone are expected to reduce the site's energy usage by 40 per cent. Standish Library has also had solar PV installed.

Wigan were awarded over £200,000 from Sport England to install solar panels and energy-saving swimming pool pumps in the community-owned Pelican Centre in Tyldesley, and Leigh Leisure Centre. Work on both began in summer 2024 and will be completed by the end of the year, saving money and carbon emissions. Wigan now has four Be Well leisure centres with operational solar panels, including Robin Park, completed in 23/24.

At the Haigh Hall redevelopment, we are reviewing the energy performance of the Hall and surrounding buildings and working through designs to ensure the areas are as energy efficiency as possible. Work ongoing at the Hall has a strong connection to horticulture and the ancient woodland that surrounds the Hall.

Wigan were successful in securing up to £1.9 million from the Social Housing Decarbonisation Fund. This year started a first fabric approach project to fit around 200 dwellings with improved cavity wall insulation, insulated flat roofs, new PVC windows and solar panels. This supports the long-term goal of achieving a net zero emission housing stock, where we are investing significantly in renewable and low carbon technologies.

Greater Manchester secured £3 million in funding for innovative tech projects across the region, aiming to cut carbon emissions and improve residents' quality of life. Wigan is one of only two GM local authorities taking part in the project.

The 5G Innovation Regions SMART Decarbonisation Network project will connect hundreds of air source heat pumps across social housing, using 5G Advanced Wireless technology and Smart Energy Grids. The grids will deliver benefits for residents, industry and public services including reduced costs for residents and housing providers and cutting emissions. Wigan are concentrating on 59 properties in the Hindley area, which could rise over the project duration. It is hoped that connecting heat pumps to a mobile network will give residents access to the best possible energy tariff, temperature control via an app and fewer visits from engineers, who can detect and fix issues remotely.

A Digital Road Network Environment trial is planned, aiming to reduce congestion and carbon emissions, improve traffic flow and reduce the amount of stationary traffic. Greater Manchester, using Wigan as a use case, will trial how other travel methods like walking and cycling can be prioritised, for example at traffic signals to improve safety.

In 2019, the council decided to not fit gas boilers in new-build council homes. Wigan have since designed alternative heating and hot water systems, including ground source, air source and all electric systems, along with high levels of insulation and airtightness. The schemes reduce the carbon footprint of new homes and help to reduce fuel poverty, incredibly important in the current economic climate. Across 2022-2024, Wigan delivered over 200 low carbon homes, with 58 air source heat pumps and 108 ground source heat pumps. The latest extra care scheme at Meadowview Court, Shevington, due to complete in 2025 includes a ground source heat pump for 32 apartments. Smaller developments at Factory Street, Tyldesley, Belle Green Lane, Ince and Heysham Road, Pemberton will include air source heat pumps at 22 new homes due to complete in 2025.

In 2022, Wigan developed a Passivhaus specification achieving high performance in insulation levels, heat loss and airtightness, marking a turning point in net zero carbon

aspirations. This was adopted on two developments, with 53 homes due to be completed to Passivhaus specification by Jan 2025. Wigan plan to deliver more Passivhaus homes in future, including proposals for 74 apartments at Logwood Place, Newtown, construction is expected to begin in 2025 following demolition of the old blocks.

2.2.11.2 Freight & Heavy Goods Vehicles

AQAP 2.7 – Engine Idling

Wigan Council actively monitor vehicle idling with the data collected being used to generate a management report. This enables targeted actions to be taken against those responsible for letting council vehicles idle unnecessarily.

2.2.11.3 Cars

AQAP 6.4 – School Travel

Wigan Council offer support to schools to help them complete and update School Travel Plans, the purpose of which is to increase walking and cycling, which in turn will reduce car use around schools, improve road safety and air quality. School Streets, Walking Bubble Schemes and Park and Stride Schemes are some of the initiatives launched in schools as part of the School Travel Plans, which then contribute to improved air quality.

2.2.11.4 Information & Resources

AQAP 7.9 – Awareness Raising

Climate awareness training has been delivered in-person to over 400 staff members, schools, community groups, businesses, and partnership organisations and includes information about air pollution.

Table 2-2 – Progress on Measures to Improve Air Quality

The top three measures to bring to the attention of residents are presented at the top of Table 2.2 (yellow-shaded section within the black outline). The wider table lists individual AQAP Objectives as reported above, with a brief progress summary for GM as a whole. Where actions have been achieved, that measure is highlighted in green.

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
4	AQAP 1.4 – Clean Air Zone Feasibility Study. Assessing implementation of the GM-wide Clean Air Plan.	Traffic Management	Urban Traffic Control, Congestion Management, Traffic Reduction	2017	2025	Transport for Greater Manchester (TfGM) & Local Authorities	Joint Air Quality Unit (JAQU)	Partially Funded	>£10 million	Planning	Reduction in NO ₂ across GM to bring about compliance with legal limit	Reduce Traffic; Increase Efficiency; Improve Fleet	Jan 2025, government approved investment-led, non-charging Clean Air Plan. Majority of NO ₂ exceedances are in regional centre. E.g., Oxford St, Manchester – high NO ₂ levels recorded in 2024, correlating with older buses running before completion of franchising.	Since Jan 2025, all buses are under local control and early indications show cleaner buses on these routes are reducing NO ₂ .
18	AQAP 3.2 – Bus Improvements. Targeted deployment of low emission/zero exhaust emission buses on key public transport corridors	Vehicle Fleet Efficiency	Promoting Low Emission Public Transport	2017	Ongoing	TfGM	Mixed	Not Funded	>£10 million	Implementation	Reduction in NO ₂ to bring about compliance with legal limit	Improve Fleet	Bus franchising complete. Increase number of EV/Euro VI buses in service. Trial of diesel bus retrofit to zero exhaust emission ongoing, with in-use performance monitoring.	Availability of vehicles and charging infrastructure at depots.
39	AQAP 7.9 – Awareness Raising. Work with residents, vulnerable groups and hard to reach communities to raise awareness of air pollution and actions to improve.	Public Information	Via Other Mechanisms	2017	Ongoing	TfGM, Local Authorities & Directors of Public Health	TfGM & Local Authorities Business as Usual Activity (BAU)/Defra Grant	Funded	£10k - £50k	Implementation	An estimated reduction in PM _{2.5} of 1-2 µg/m ³	Reduce Traffic; Increase Efficiency; Improve Fleet; Increase awareness of health impact from solid fuel burning	Research undertaken by University of Manchester into behaviours behind burning solid fuel. Communications and winter fuel marketing campaign developed and ran across social media, print, radio and TV.	Evaluation of domestic burning project to take place 2025.
1	(AQAP 1.1) Construction Management Guidance	Policy Guidance & Development Control	Air Quality Planning & Policy Guidance	2017	2017	LA's	LA – BAU Activity	Funded	< £10k	Completed	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	GM Task & Finish Group is improving standardisation of conditions across GM. Construction management guidance referred to by local authority environmental management teams. District specific details are in updates above.	N/A
2	(AQAP 1.2) Development Planning Guidance	Policy Guidance & Development Control	Air Quality Planning & Policy Guidance	2017	2017	LA's	LA – BAU Activity	Funded	< £10k	Completed	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	Guidance now referred to by LA environmental management teams. District specific details are in updates above.	N/A
3	(AQAP 1.3) Cumulative Development Database	Policy Guidance & Development Control	Air Quality Planning & Policy Guidance	2017	2017	TfGM	TfGM – BAU Activity	Funded	< £10k	Completed	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	Updates to database have been paused. Utility was found to be of limited value to Local Authorities. No further progress has been reported on to date and the objective has since ended.	Limited Use hence the completion of this objective.

4	(AQAP 1.4) Clean Air Zone Feasibility Study	Traffic Management	UTC, Congestion Management, Traffic Reduction	2017	2027	TfGM & LA's	JAQU	Partially Funded	> £10 million	Implementation	Reduction in NO ₂ across GM to bring about compliance with legal limit	Reduce Traffic; Increase Efficiency; Improve Fleet	Actions covered by Clean Air Plan work conducted by TfGM in partnership with the 10 Local Authorities. Detailed updates are available at www.cleanairmgm.com	As above
5	(AQAP 1.5) 20 mph zones	Traffic Management	Reduction of speed limits, 20 mph zones	2018	Ongoing	TfGM & LA's	LA – Various Funding Sources	Not Funded	< £10k	Implementation	N/A	Increase Efficiency	More 20 mph zone schemes and traffic calming measures are being explored/introduced. The schemes were found to reduce speeding in residential areas, encourage active travel and improve air quality. District specific details are in updates above.	N/A
6	(AQAP 1.6) Encouraging Travel Planning	Promoting Alternative Travel	Personalised Travel Planning	2017	Ongoing	TfGM	TfGM – BAU Activity	Funded	£50k - £100k	Implementation	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	Work ongoing to help employers assess the travel habits of workforce, through toolkits on TfGM website. Each authority has noted work they are doing to encourage travel planning.	N/A
7	(AQAP 1.7) Taxi and Private Hire	Promoting Low Emission Transport	Taxi Licensing Conditions	N/A	2027	LAs	Local Authority – BAU Activity	Funded	£50k - £100k	Implementation	To bring about compliance with the legal limit for NO ₂	Reduce Traffic; Increase Efficiency	All GM Authorities adopted emissions standard, requiring licensed hackneys and PHVs to be a minimum of Euro 6 (diesel) or Euro 4 (petrol) by 31 December 2025.	Some GM Authorities adopted the emission standard on expectation of Clean Air funding from government to support the upgrade to compliant vehicles. GM requested £30.5m to help upgrade GM-licensed hackney and private hire vehicles but received £8m.
8	(AQAP 1.8) Green Infrastructure	Transport Planning & Infrastructure	Other	2019	Ongoing	TfGM	TfGM – BAU Activity	Funded	£10k - £50k	Implementation	N/A	Increase Efficiency	Local authorities provided updates on progress of work in 2024. This includes integrating green infrastructure into planning developments, developing strategy and biodiversity improvement works.	N/A
9	(AQAP 2.1) Delivery & Servicing Plan Toolkit	Freight & Delivery Management	Delivery & Service Plan	2017	2022	TfGM	TfGM – BAU Activity	Funded	£10k - £50k	Completed	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	Limited progress at GM-wide level.	TfGM dedicated resource no longer funded. Currently considering role and resourcing for freight activity. Local Authorities continue to use Delivery and Servicing Plan guidance with businesses and public bodies.

10	(AQAP 2.2) Urban Distribution Centres	Freight & Delivery Management	Freight Consolidation Centre	2020	TBC	TfGM	TfGM – BAU Activity	Partially Funded	£10k - £50k	Planning	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	Worked with businesses/couriers on facilitation of sustainable travel and e-cargo bikes solutions. Couriers happy to trial in GM due to high quality cycling network. TfGM has dedicated webpage with information on deploying eCargo bikes. Businesses continue to deploy eCargo bikes in their fleet and GM predicts this will continue.	Market dependant
11	(AQAP 2.3) Urban Consolidation	Freight & Delivery Management	Other	2019	TBC	TfGM	TfGM – BAU Activity	Funded	£10k - £50k	Implementation	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	GM expects further investment into sustainable distribution and consolidation centres. Plans to be set out in Local Transport Plan.	N/A
12	(AQAP 2.4) Access for Freight to Key Economic Centres and Sub-regional Freight Facilities	Promoting Travel Alternatives	Promote use of rail and inland waterways	2018	TBC	TfGM	TfGM – BAU Activity	Not Funded	N/A	Planning	N/A	Reduce Traffic; Increase Efficiency	Updating GM Freight Strategy with communications around development ongoing. Freight policy and strategic direction to be incorporated into GM Local Transport Plan due in 2026.	N/A
13	(AQAP 2.5) Freight Information Channels	Freight & Delivery Management	Other	2017	Ongoing	TfGM	TfGM – BAU Activity	Funded	£10k - £50k	Implementation	TBC	Reduce Traffic; Increase Efficiency	TfGM are partner organisation in CLOCS and FORS to bring benefits to safety and environment. Monthly meetings discuss relevant topics that could be used across organisations.	N/A
14	(AQAP 2.6) Diesel Transport Refrigeration Units (TRUs)	Freight & Delivery Management	Other	N/A	TBC	TfGM	TfGM – BAU Activity	Not Funded	N/A	Paused	N/A	Increase Efficiency; Improve Fleet	No progress to date.	Work suspended due to GM priorities. However, this will be reconsidered as part of the GM 5YEP
15	(AQAP 2.7) Engine Idling	Promoting Low Emission Transport	Other	2017	Ongoing	TfGM & LA's	TfGM & LA's – BAU Activity	Not Funded	< £10k	Implementation	N/A	Increase Efficiency	Building on 2022 report 'Tackling Vehicle Idling – Options', LAs have continued work and have reported on this above.	Enforcement challenges obtaining driver/owner details, FPN will not cover cost of enforcement action. Concluded government should review legislation for significant progress to be achieved.
16	(AQAP 2.8) Alternative Fuels	Promoting Low Emission Transport	Other	2017	Ongoing	TfGM	TfGM – BAU Activity, Office of Low Emission Vehicles, Early Measures	Partially Funded	£1 million - £10 million	Implementation	N/A	Increase Efficiency; Improve Fleet	In 2023 Trafford Green Hydrogen site received planning approval. GM continues to promote Electric Vehicles as part of 'Electric Travel' website. GM continues to roll out EV chargers across the region, through funding streams such	Demand and supply. For Hydrogen, infrastructure needed to deliver the fuel to the end user and the availability of H2 vehicles in the market. EV usage expected to

													as CRSTS & LEVI. GM expects an increase of charge points into the near future. Investing in infrastructure makes transitioning easier for our residents. Many LAs are introducing EV's to their fleet	increase in the coming years. Challenges around cost and access to home charging.
17	(AQAP 3.1) Bus Priority Programmes	Transport Planning & Infrastructure	Bus Route Improvements	2017	Ongoing	TfGM	TfGM – CRSTS	Funded	£500k - £1 million	Implementation	To bring about compliance with the legal limit for NO ₂ by 2025	Reduce Traffic; Increase Efficiency	At GM-wide level, bus infrastructure a core element of the CRSTS programme. Junction upgrades and real-time traffic monitoring allow bus and tram prioritisation.	Modal shift continues to be a challenge. Bus priority programmes to increase reliability and attractiveness.
18	(AQAP 3.2) Bus Improvements	Vehicle Fleet Efficiency	Promoting Low Emission Public Transport	2017	Ongoing	TfGM	Mixed	Not Funded	>£10 million	Implementation	Reduction in NO ₂ to bring about compliance with legal limit	Improve Fleet	Bus franchising complete. Increase number of EV/Euro VI buses in service. Trial of diesel bus retrofit to zero exhaust emission ongoing, with in-use performance monitoring.	Availability of vehicles and charging infrastructure at depots.
19	(AQAP 3.3) Hybrid Bus Improvements	Vehicle Fleet Efficiency	Promoting Low Emission Transport	2017	2023	TfGM	TfGM – BAU Activity	Funded	£500k - £1 million	Complete	N/A	Increase Efficiency	In 2023 government advised TfGM to pause new spending on bus retrofit due to evidence of poor and highly variable in-use performance. Government advised of a six-month research programme to investigate causes of poor bus retrofit performance. GM has incorporated revised guidance from JAQU, into CAP modelling. Further work will be referenced in CAP narrative.	To date the outputs of the government research programme have not been made available to GM.
20	(AQAP 3.4) Trial of Low Emission Vehicles	Vehicle Fleet Efficiency	Promoting Low Emission Public Transport	2017	2023	TfGM	TfGM – BAU Activity	Funded	> £1 million	Complete	N/A	Improve Fleet	Franchising and CRSTS funding are prioritising electrification of bus fleet, no other trials of Low Emission Vehicles were conducted in the last two years. Zero emission bus data will be analysed to identify opportunities for optimisation. Further work will be referenced in CAP narrative.	N/A
21	(AQAP 4.1) Cycle Programmes	Promoting Travel Alternatives	Promotion of Cycling	2017	Ongoing	TfGM & LAs	Mixed	Partially Funded	> £10 million	Implementation	Reduction in NO ₂ and PM	Reduce Traffic	Cycle network across GM continued to grow. Further investment in new infrastructure and schemes like bike libraries. Specific details are in the updates above.	N/A
22	(AQAP 4.2) Public Cycle Hire	Transport Planning & Infrastructure	Public Cycle Hire Scheme	2017	Ongoing	TfGM	Mayor's Challenge Fund	Funded	> £10 million	Implementing	Reduction in NO ₂ and PM	Reduce Traffic	Ridership continued to increase in 2024.	Cycle hire programme has encountered

													Specific details are in updates above.	regular vandalism. Action plan in place to resolve. There was a drop in vandalism when comparing 2023 to 2024.
23	(AQAP 4.3) Cycle Logistics	Promoting Travel Alternatives	Promotion of Cycling	2017	Ongoing	TfGM	TfGM – BAU Activity, INTERREG	Funded	£500k - £1 million	Implementation	Reduction in NO ₂ and PM	Reduce Traffic	During 2022-2025, TfGM's Community Access Grant offered grant funding to community organisations, small businesses, NHS healthcare providers and education providers to deliver cargo cycle solutions, accessible/adaptive cycles and/or community innovation.	Our wide cycleways have meant that companies such as Amazon are attracted to the region.
24	(AQAP 4.4) Walking & Wheeling to 2040	Promoting Travel Alternatives	Promotion of Cycle & Walking	2017	Ongoing	TfGM	TfGM – BAU Activity and range of DfT Funding	Partially Funded	> £10 million	Implementation	Reduction in NO ₂ and PM	Reduce Traffic	Work ongoing on Active Travel Mission set out by Dame Sarah Storey. 2 nd Active Travel in GM Annual Report (2024) published at start of 2025.	N/A
25	(AQAP 5.1) Car Clubs	Alternatives to Private Vehicle Use	Car Clubs	2017	Ongoing	LAs	TfGM & LA – BAU Activity INTERREG	Partially Funded	£500k - £1 million	Implementation	Reduction in NO ₂ and PM	Reduce Traffic; Improve Fleet	Each LA has reported on any progress in 2024. TfGM have paused their plans to develop a scheme.	Low usage, lack of bids from operators to run contract and vandalism.
26	(AQAP 5.2) Dynamic Road Network Efficiency and Travel System Information	Public Information	Via other mechanisms	2017	Ongoing	TfGM	TfGM – BAU Activity	Funded	£1 million - £10 million	Implementation	N/A	Increase Efficiency	TfGM continues to manage the road network efficiently. Specific details are in updates above.	N/A
27	(AQAP 6.1) Plugged in Places EV Charging Network	Promoting Low Emission Transport	Other	2018	Ongoing	TfGM	TfGM – BAU Activity, Early Measures Funding, OLEV Funding	Partially Funded	£1 million - £10 million	Implementation	Reduction in NO ₂	Improve Fleet	Ongoing work on EV charging network in 2024. TfGM changed tariff to remain competitive. This saw usage increase towards end of year. TfGM began to develop procurement documentation for LEVI scheme, with support of the 10 LAs.	N/A
28	(AQAP 6.2) Car Use Allowances	Alternatives to private vehicle use	Other	2017	Progress is described by district in the accompanying ASR report.	LA's	District Budgets TBC	Partially Funded		Planning	N/A	Reduce Traffic	Progress is described by local authority in the above narratives, where work was carried out in 2024.	N/A
29	(AQAP 6.3) Local Authority Parking Charges	Traffic Management	Workplace Parking Levy, Parking Enforcement on Highway	2017	Progress is described by district in the accompanying ASR report.	LA's	LA's	Partially Funded		Planning	N/A	Reduce Traffic	Progress is described by local authority in the above narratives, where work was carried out in 2024.	N/A
30	(AQAP 6.4) School Travel	Promoting Travel Alternatives	School Travel Plans	2017	Ongoing	TfGM & LA's	TfGM & LA – BAU Activity	Partially Funded	£10k - £50k	Implementation	Reduces NO ₂ and PM	Reduce Traffic; Increase Efficiency	Work carried out to promote sustainable school travel at GM level with TfGM. LAs carried out tailored work for their areas including active travel provision on streets and developing travel plans to educate parents about more sustainable options.	Resistance from parents
31	(AQAP 7.1) Website & Online Resources	Website & Online Resources	Via the Internet	2017	2019	TfGM	TfGM – BAU Activity	Funded		Implementation	N/A	Reduce Traffic; Increase	Continued use of online resources to promote air quality	N/A

												Efficiency; Improve Fleet	messages. Clean Air GM website updated and Burn Better campaign launched.	
32	(AQAP 7.2) Online Route Finding	Promoting Travel Alternatives	Personalised Travel Planning	N/A	Ongoing	TfGM	TfGM – BAU Activity	Funded		Implementation	Reduction in NO ₂ and PM	Reduce Traffic; Increase Efficiency	The Journey Planner went live (resource to help best travel modes). Introduction of Live Bus Tracking in Bee Network app, allowing passengers to track their bus on the network, using real time data.	N/A
33	(AQAP 7.3) Air Pollution Alert	Public Information	Via other mechanisms	2018	Ongoing	TfGM	TfGM – BAU Activity	Funded	£10k to £50k	Complete	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	GM Pollution alert service set up. There were 717 users as of Dec 2024. Further work to increase sign-ups planned for 2025.	N/A
34	(AQAP 7.4) Health Effects of Air Pollution in Greater Manchester	Public Information	Via the internet	2017	2024	TfGM	UKHSA BAU	Funded		Implementation	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	Although previously classed as complete, due to importance, work continues to be carried out that relates to the criteria of this objective, following hiring of new Air Quality Lead Officer.	N/A
35	(AQAP 7.5) Contingency Report Plan	Public Information	Other	N/A	Ongoing	TfGM	PHE BAU	Partially Funded		Implementation	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	Reported at GM level only. GM Resilience Forum has plans in place to respond to major incidents within Greater Manchester impacting air quality.	N/A
36	(AQAP 7.6) TfGM Air Quality Team	Other	Other	2017	Ongoing	TfGM	TfGM – BAU Activity	Funded	£10k - £50k	Completed	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	TfGM and the 10 LA's maintain good working relationships and work together. The GM Air Quality Working Group meet every quarter. TfGM AQ team had two new additions in 2024. PM _{2.5} Defra funded project is progressing. GM AQ Network went out to tender.	N/A
37	(AQAP 7.7) Air Quality Monitoring Database	Other	Other	2017	Ongoing	TfGM & LA's	TfGM & LA's – BAU Activity	Funded	< £10k	Implementation	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	TfGM publish air quality data on Clean Air GM website.	N/A
38	(AQAP 7.8) Traffic Flow Data	Other	Other	2017	Ongoing	TfGM	TfGM – BAU Activity	Funded		Implementation	N/A	Reduce Traffic; Increase Efficiency; Improve Fleet	Utilising ANPR data to understand vehicle emission data in more detail and the effect on parts of the region. The data will be used for the monitoring and evaluation of CAP.	N/A
39	(AQAP 7.9) Awareness Raising	Public Information	Via other mechanisms	2017	Ongoing	TfGM & LA's	TfGM & LA's – BAU Activity	Funded	£10k - £50k	Implementation	Reduction in NO ₂ and PM _{2.5}	Reduce Traffic; Increase Efficiency; Improve Fleet	Research undertaken by University of Manchester into behaviours behind burning solid fuel. Communications and winter fuel marketing campaign developed and ran across social media, print, radio and TV. Additional LA updates are in respective section.	Evaluation of domestic burning project to take place 2025.

2.3 PM_{2.5} – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy⁸, local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter (PM_{2.5}). There is clear evidence that PM_{2.5} (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

GM uses a combination of methods to determine the level of PM_{2.5} across the city region. These include a network of 10 PM_{2.5} automatic monitors and the Defra modelled background. Forty indicative low-cost monitors are installed as part of the Defra funded Domestic Burning campaign which, although not approved for inclusion in the ASR, give general trends in PM_{2.5} across the region.

Defra 2021-based background maps for 2024 suggest PM_{2.5} concentrations of 5.3 - 9.7 µg/m³ across the GM city region, of which approximately 64% is from secondary sources, 22% residual and salt sources, 6% from domestic sources, 4% from industry, 2% from transport sources and 1.2% point sources.

As a Breathe Life City Region since 2017 ([Link to Breathe Life website](#)) it is our intention to work towards the WHO (World Health Organisation) air quality guidelines, while recognising that a significant proportion of PM_{2.5} comes from outside of GM. Nine GM authorities have incorporated these targets in the Places for Everyone Plan statutory development plan ([Link to Places For Everyone, GMCA](#)), and there are concerted efforts to further reduce the proportion of PM_{2.5} emissions over which GM authorities have an influence and work towards the WHO guideline annual mean of 5 µg/m³ by 2030.

The Greater Manchester 5-Year Environment Plan 2025-2030 contains objectives and targets to improve general air quality and PM_{2.5} specifically. The region is already meeting the long term 2040 UK air quality objective of 10 µg/m³ and WHO Interim Target 4 for PM_{2.5}, but there is also a local target to achieve a 22% reduction in PM_{2.5} exposure by January 2028 compared to 2018 (measured using Defra's Criteria).

⁸ Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

The Public Health Outcomes Framework sets out indicators of the state of public health. It contains an indicator relating to the fraction of annual all-cause adult mortality attributable to PM_{2.5} pollution ([D01 - Fraction of mortality attributable to particulate air pollution, link in text](#)). This is the mortality burden associated with long-term exposure to PM_{2.5} at current levels, expressed as the percentage of annual deaths from all causes in those aged 30 and over. Table 2-3 presents the 2023 estimated mortality fraction attributable to PM_{2.5} for each GM local authority; the North West England average is 4.9% and England is 5.2%.

Table 2-3 - Estimated Annual Mortality in 2023 attributable to PM_{2.5} for Greater Manchester Districts

Authority	8. Attributable Fraction (%)
Bolton	5.2
Bury	5.3
Manchester	5.6
Oldham	5.6
Rochdale	5.4
Salford	5.4
Stockport	5.3
Tameside	5.6
Trafford	5.2
Wigan	5.2

The GM AQAP focusses on reducing concentrations of NO₂ (as the pollutant for which the AQMA is declared), however it contains measures to address PM_{2.5} either directly or as a co-benefit. Examples of which are listed below:

- Continued implementation of the AQAP and individual local authority air quality and climate change works containing actions that have co-benefits for reducing PM_{2.5} (e.g. decarbonisation of heating and increasing active travel).
- Recognising that while electric and alternative fuel vehicles can offer reductions in NO₂ and CO₂, they can still be a source of PM from tyre and brake dust or road surface wear. This is under constant review and responsive to national guidance.
- Working with public health partners and universities to better understand the effects of PM_{2.5} on the health of residents in Greater Manchester.
- Public engagement to support the air quality agenda, raising awareness with residents on making better choices to prevent PM_{2.5} (e.g. reducing solid fuel burning, choosing active travel etc.). This includes health-based campaigns.

- Using indicative monitors across the city region with computer modelling to identify yearly trends in PM, to better understand source contribution, background concentrations and to assess the effectiveness of the 'Burn Better' campaign.
- Greater Manchester has launched an Information Hub on the Green City website to educate residents about health impacts and regulations ([Link to Burn Better GM on GM Green City website](#)).
- Investing in the Bee Network to provide an attractive and low-cost alternative to personal car use.
- Greater Manchester promotes national campaigns such as "Clean Air Day/Night," "Ready to Burn," Defra's "Burn Better" and "Burnright."
- Members of the Defra AQ Hub to share knowledge and best practice with other local authorities.
- Meet with community groups and campaigners to better understand local concerns and how we can work together on air quality issues.

More detail on the work being undertaken can be found in the 5-Year Environment Plan document, by following [this link to Five-Year Environment Plan on the Greater Manchester Combined Authority website](#).

2.3.1 Smoke Control

GM has smoke control areas covering most local authorities, details of which can be found using this [link to the UK Air Smoke Control Area Interactive Map](#) or via the relevant local authority website.

In 2024, GM local authorities responded to smoke control complaints using the toolkit. Upon further investigation by officers, only a small proportion required warning letters and advice about responsible burning and burning better to be sent. Following this, no further reports were received to suggest an ongoing problem and no further action or financial penalties were required. This will continue to be monitored into 2025. Residents will be encouraged to use authorised fuels, burn better and improve home energy efficiency before financial penalties are considered. The number of domestic chimney smoke nuisance complaints received per Local Authority are presented in Table 2-4.

Table 2-4 - Smoke from Domestic Chimney Complaints Received Across Greater Manchester Smoke Control Areas, 2024

Local Authority	Smoke From Domestic Chimney Complaints	Enforcement Actions (Warning Letters and/or Visits)	Penalty Notice Issued	Penalty Payments Received
Bolton	6	10	0	0
Bury	14	6	0	0
Manchester	7	7	0	0
Oldham	16	12	0	0
Rochdale	13	13	0	0
Salford	6	0	0	0
Stockport	72	21	0	0
Tameside	15	15	0	0
Trafford	15	14	0	0
Wigan	12	0	0	0

2.3.2 Greater Manchester Smoke Emissions Enforcement Toolkit

The GM Air Quality Working Group (led by Manchester) produced a Smoke Emission Enforcement Toolkit in 2023 which was shared with the Defra Air Quality Hub for use nationally by other local authorities. The pack contains a briefing note, a policy protocol, procedural flowchart, template documents and letters for use with smoke enforcement work, and which have been updated with the statutory guidance revisions. The aim is to ensure effective enforcement and consistency in enforcement measures. Figure 2-20 shows an example of the procedural flowchart created for the toolkit.

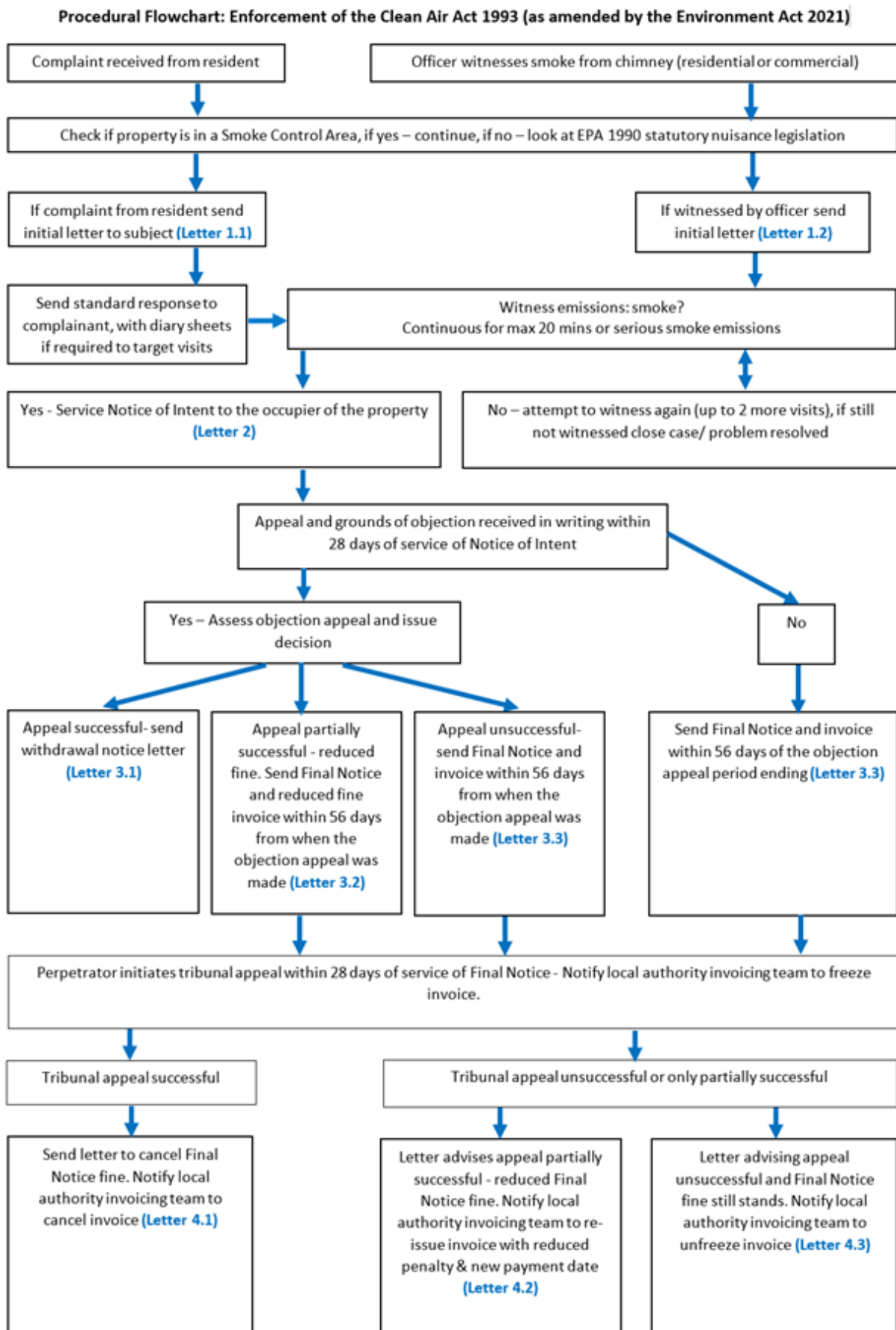


Figure 2-20 - GM Smoke Emissions Enforcement Toolkit Procedural Flowchart

2.3.3 Domestic Burning Awareness

Background

On behalf of the 10 GM local authorities and Greater Manchester Combined Authority, TfGM secured a £570,000 Air Quality Grant from Defra in March 2022 to fund a multi-year scientific research and behaviour change project in relation to the risks of fine particulate air pollution (PM₁₀ and PM_{2.5}) from domestic solid fuel burning including indoor woodburning stoves, open fires, and garden bonfires or barbeques.

Communication campaigns were undertaken during the winter burning seasons in 2022/23, 2023/24, and 2024/25. The most recent campaign ran from November 2024 until February 2025. Highlights of these campaigns are summarised below:

- **Winter 22/23:** The first campaign ran between December - February targeting areas with known domestic burning equipment users to increase awareness of the health/environmental impact and encourage the use of cleaner fuels. This directed people to Defra's 'Burn Better' campaign website. Through a mix of organic and paid activity, this generated 12 million opportunities for people to see or hear campaign messaging, driving over 10,000 visits to the Defra site, and 15,000 video views through communications and marketing activity.
- **Winter 23/24:** Alongside supporting the Defra 'Burn Better, Breathe Better' campaign up to December 2023, GM ran a second campaign. Between January – March, Burn Better GM was an organically-led campaign targeting areas with known users of domestic burning appliances. It directed people to a new local Information Hub on the GM Green City website to educate residents about the health impacts and regulations surrounding domestic burning. The website can be found via [this link to the Burn Better GM website](#).
- **Winter 24/25:** Using new research and data from focus groups run by the University of Manchester, and early results from a network of over 40 indicative air quality monitors, a multi-channel campaign was delivered. This targeted existing users of domestic burning equipment in areas with a high amount of domestic solid fuel burning activity and people who may consider installing equipment in the future. The campaign considered the ongoing cost-of-living crisis and likelihood that some people might be reliant on domestic burning to supplement or provide an alternative to conventional heating sources (gas, electricity).

Campaign objectives

The 2024/25 campaign aimed to:

- Raise awareness of the health impacts of air pollution from domestic solid fuel burning.
- Raise awareness of 'Ready to Burn' resources and how to 'burn better.'
- Raise awareness of smoke control areas.
- Change behaviour to reduce the number of households burning solid or incorrect fuel.

2024/25 Campaign overview

The 2024/25 campaign launched on 4 November 2024. A press release was issued by the GMCA on behalf of the 10 local authorities to mark the campaign launch and paid and organic campaign content was rolled out incrementally from November until the end of February 2025.

Paid channels included electronic billboards, radio, social media (Facebook and Instagram), out of home (digital and print), direct mail (leaflets), and a partnership with Manchester Evening News (print and digital placements).

Organic channels included social media and newsletters, with stakeholder toolkits provided to the GMCA, all 10 local authorities, and wider GM partners to encourage sharing of campaign materials via social media and newsletter channels, adding any borough-specific messaging as required.

Four dedicated Burn Better GM webpages were developed and housed on the GM Green City website, replacing previous domestic burning content. Paid and organic promotion included links, QR codes or a campaign-specific URL directing to one of the four webpages where possible.

Creative assets featured a key message overlaid on an image of a fireplace or chimney with smoke effects, and the GMCA and Burn Better logos. The key message was phrased as a question and answer to draw attention. A URL or QR code was included on assets when appropriate to direct to a relevant Burn Better GM webpage. Examples of these assets in-situ are shown in Figure 2-21. Creative asset variations were:

- Did you know? Keeping your stove and chimney clean reduces harmful pollution. (single chimney image)
- Did you know? Burning the wrong fuel to heat your home can damage your health. (fireplace image)

- Did you know? Tiny particles in fire smoke can harm your health. (log burner image)
- Did you know? In most areas there are rules about what you can burn at home. (multiple chimneys image)

Audiences targeted were residents of Greater Manchester, particularly parents, adults aged over 30 living in smoke control areas, and people living in postcode districts containing around 100-200 registered log burners.



Figure 2-21 - Burn Better GM Campaign Assets In-situ

A second survey was conducted by the University of Manchester to seek feedback about the campaign and domestic burning habits, linked through a dedicated page on the GM Green City website. Around 330 responses were received, the findings will be reported in 2025.

2024/25 Summary: TfGM's domestic burning campaign was successful in generating more than 16 million opportunities for people to see or hear campaign messaging, driving over 9,000 visits to the Burn Better GM Information Hub through communications and marketing activity. This included:

- More than 3 million opportunities to see/hear the GM #BurnBetter story in traditional media
- 34.3 million impressions across social and paid channels
- 16,000 views of campaign social videos and animations on organic channels

Future phases and next steps

A decision is still to be confirmed on whether a fourth campaign will run in winter 2025/26.

Indicative Monitoring

The contract for 43 MCERT indicative monitors was awarded to Ricardo, to install 40 units across the city region and to co-locate three with the real-time analyser in Piccadilly Gardens. Ricardo manage the monitors and undertake the quality assurance and quality control of the data collected. The monitors were installed throughout January 2024, and it was anticipated to report the data as an appendix to this year's ASR. However, due to technical issues, outside of GM's control, the quality assured dataset for 2024 was not available in time for submission.

Research

Defra are clear in the Air Quality Strategy that PM_{2.5} reductions can be achieved if those using solid fuel burners do so using the correct fuel for their appliance and operate it in accordance with manufacturer instructions. The University of Manchester were awarded a contract to undertake research into behaviours behind solid fuel burning, including attitudes and techniques.

In 2023, the University hosted a Civic Panel with two groups of participants. The focus group findings demonstrated a low level of knowledge or understanding of the environmental and health impacts of domestic burning across different income groups. The outcomes fed into developing the 2024 media campaign. An appraisal of the 2024/2025 Burn Better GM campaign will be undertaken by the University of Manchester with a further survey into attitudes around domestic burning, this will be reported in next year's ASR.

2.4 CAP NO₂ Monitoring Results 2024

2.4.1 Legislative Context

Legislation	Description
The European Union Directive 2008/50/EC Ambient Air Quality and Cleaner Air for Europe.	This forms the basis of UK air quality legislation. Although published in 2007, the Air Quality Strategy is consistent with The Air Quality Standards Regulations (England) 2010 (2010 Regulations). The European Directive is transposed into UK law through the 2010 Regulations which remain binding post withdrawal from the EU. The UK government is responsible for compliance with provisions of the transposed EU Directives. The UK currently is in breach of limit values for nitrogen dioxide and PM₁₀ (particulate matter with an aerodynamic diameter less than 10 µm).
Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019	EU limit values were transposed into UK law by the Air Quality Standards Regulations 2010 and modified to account for EU exit by the Air Quality (Amendment of Domestic Regulations) (EU Exit) Regulations 2019, so the legal limits still stand. On the UK government's behalf, the Department for Transport and Defra have Public Service Agreements relating to the limit values.
The Air Quality (England) (Amendment) 2000/2002 Regulations.	Legislates for UK air quality objectives (AQOs) for pollutants set out in the 2000 Air Quality Strategy, which was revised in 2007. AQOs exist for a variety of pollutants including NO₂, NO_x, PM₁₀ and PM_{2.5}. They are established to protect human health, vegetation and ecosystems.
Environment Act 1995, Part IV	Introduced a system of local air quality management in the UK, requiring local authorities to review and assess air quality within their boundaries regularly and systematically against AQOs. Local authorities must appraise development and transport plans against these objectives and make plans to meet the AQOs where they are exceeded.
The Air Quality Standards Regulations 2010	These regulations set out the assessment criteria of ambient air quality and contain a duty of the Secretary of State to meet limit values. The secretary of state has powers to give directions to local authorities under the Environment Act 1995.

2.4.2 Differences between monitoring undertaken for the Clean Air Plan and LAQM

Monitoring is undertaken to determine compliance with the NO₂ legal limit values in accordance with the Clean Air Plan and government direction, under section 85 of the Environment Act 1995. Additionally, the 10 districts monitor NO₂ in accordance with the requirements of Part IV of the Environment Act 1995 and associated statutory guidance, this is Local Air Quality Management (LAQM).

The two monitoring regimes use separate siting criteria to assess exposure which often leads to different types of monitoring locations. CAP monitoring assesses exposure as defined by the Air Quality Standards Regulations (England) 2010 legal limit values, with roadside being typically worst-case and hence the focus for monitoring. LAQM monitoring is concerned with exposure at locations of relevant public exposure where the Air Quality Objectives apply, this can include roadside but only in exceptional circumstances.⁹ LAQM monitoring includes measurements at background and industrial locations and is not limited to road traffic sources.¹⁰

The regimes also have different criteria to determine exceedances. LAQM defines values over 39.9 µg/m³ as exceeding the 40 µg/m³ legal limit.¹¹ For CAP, the government Joint Air Quality Unit defines results over 40.4 µg/m³ as an exceedance.¹² These definitions should be considered when comparing results from individual monitoring locations.

Two legal limits for NO₂ apply to both regimes:

- Short-term 1-hour limit - 200 µg/m³ (not to be exceeded more than 18 times a calendar year).
- Long-term annual average limit - 40 µg/m³.

To determine compliance with 1-hour mean limit values, research undertaken for Defra, outlined in LAQM.TG22, identified that road traffic emission related exceedances are unlikely to occur where the annual mean concentration is below 60 µg/m³.

⁹ Locations where the public might be regularly exposed. Façades of residences, schools, hospitals, care homes etc. Kerbside locations are usually excluded, unless the public are likely to be exposed for longer periods. More details can be found via [this link to the Technical Guidance document](#).

¹⁰ Background sites provide useful information, i.e. long-term trends, general population exposure and an indication of pollution reduction away from roadside sources, as opposed to measuring exceedances.

¹¹ An exceedance defines a time period during which the concentration of a pollutant is greater than, or equal to, the appropriate air quality criteria. <https://uk-air.defra.gov.uk/air-pollution/glossary#E>

¹² IPR guidance underpinning Air Quality Standards Regulations 2010 stipulates compliance should be assessed using data of 'the same numeric accuracy' as the limit value. Therefore, 40.4 µg/m³ is rounded down to 40 µg/m³ and is not an exceedance. [Link to IPR guidance](#).

For CAP, government has directed GM (and other areas) under UK law to address NO₂ exceedances at the roadside in the shortest possible time. In GM, this direction specifically focuses on the long-term annual average legal limit (40 µg/m³).¹³

2.4.3 Clean Air Plan monitoring 2024

In 2024, monitoring for the CAP was carried out at 270 locations (up from 248 in 2023), with 38 sites of exceedance (down from 64 in 2023). A further 73 locations were considered to be at risk of exceedance (down from 78 in 2023).

- Monitoring data for 2024 shows air pollution has continued to improve in GM compared to 2023 and is significantly lower than levels recorded pre-pandemic.
- In 2019, there were 129 exceedance locations, compared to 38 in 2024.
- There are now five districts across the city region with no exceedances of the NO₂ legal limit: Bolton, Bury, Rochdale, Salford and Trafford
- This latest air quality monitoring data continues a really encouraging trend and indicates that the steps Greater Manchester is taking to invest in cleaner buses through the Bee Network is helping clean up the air we all breathe.
- By taking back control of local buses, the city region is delivering cleaner, greener and more reliable services, with nearly 300 electric buses running across the Bee Network. Prior to bus franchising fewer than 2% of buses in GM were electric, now 17% of the fleet is zero exhaust emission. By the end of 2025/26, we expect a quarter of buses to be electric.
- 75% of Bee Network buses are compliant with Clean Air Standards, up from 9% in 2017.
- The Clean Air Plan will see further investment in zero exhaust emission buses, as well as funding for cleaner taxis and targeted traffic measures to reduce pollution.
- Our bus depots are being electrified as we work to deliver a fully electric fleet by 2030. Work is complete at Bolton and Oldham with a new fully electric depot at Ashton. Further upgrades are being made at Middleton and Hyde during 2025.
- The majority of NO₂ exceedances (31) are in the regional centre. At Oxford Street in Manchester city centre, monitoring shows high levels of NO₂ were recorded in 2024. When looking at this location, a mix of older buses were running before the completion of bus franchising. Since January 2025, early indications are that zero exhaust emission and cleaner buses now on the Oxford Road corridor are reducing

¹³ The short-term hourly limit was only exceeded in GM in 2016 at one site on Oxford Road.

NO₂ levels. We are working with Manchester City Council to consider additional monitoring at this location to further understand any other influences on air quality.

Tables 2-5 to 2-9 summarise the 2024 CAP results. Details of CAP automatic sites can be found in Table A.1 in Appendix A.

Table 2-5 - CAP Monitoring Site Data across Greater Manchester 2024

Authority	Non-automatic sites (with valid data capture)	Concentration range (all sites) (µg/m ³)	Exceedances of NO ₂ Annual Mean Limit (non-automatic sites)
Bolton MBC	19	40.4 - 24.5	0
Bury MBC	24	39.7 – 21.9	0
Manchester CC	127	59.4 – 22.6	31
Oldham MBC	10	42.2 – 25.9	1
Rochdale MBC	6	36.2 – 25.7	0
Salford CC	32	39.3 – 26.2	0
Stockport MBC	23	47.9 – 26.0	3
Tameside MBC	19	41.3 – 18.6	2
Trafford MBC	4	29.7 – 26.7	0
Wigan MBC	6	41.8 – 27.0	1
Total	270	59.4 – 18.6	38

Table 2-6 - Number of GM CAP Monitoring Sites, 2018 - 2024

Authority	2018	2019	2020	2021	2022	2023	2024
Bolton	5	14	14	14	32	19	19
Bury	5	16	16	16	36	19	20
Manchester	20	91	91	91	160	109	123
Oldham	0	9	9	9	19	13	10
Rochdale	0	12	12	12	15	6	6
Salford	5	27	27	27	60	32	31
Stockport	10	19	19	19	47	24	22
Tameside	5	14	14	14	32	19	19
Trafford	5	14	14	14	18	4	4
Wigan	0	6	6	6	13	3	4
Total	55	222	222	222	432	248	270

Table 2-7 - Number of GM CAP Exceedances (>40.4 µg/m³), 2018 - 2024

Authority	2018	2019	2020	2021	2022	2023	2024
Bolton	1	4	1	2	4	2	0
Bury	2	10	0	2	6	3	0
Manchester	14	65	8	25	49	39	31
Oldham	0	5	0	1	5	1	1
Rochdale	0	4	1	1	1	0	0
Salford	1	16	0	7	13	4	0
Stockport	6	15	2	3	8	7	3
Tameside	4	6	4	4	8	7	2
Trafford	1	3	0	0	0	0	0
Wigan	0	1	0	0	1	1	1
Total	29	129	16	45	95	64	38

Table 2-8 - Number of CAP sites at Risk of Exceedance (35 - 40.4 µg/m³), 2018 - 2024

Authority	2018	2019	2020	2021	2022	2023	2024
Bolton	3	2	3	3	4	3	3
Bury	3	2	3	4	10	6	9
Manchester	1	6	22	18	49	31	31
Oldham	0	1	4	4	5	4	1
Rochdale	0	3	0	2	4	3	1
Salford	0	0	6	7	15	17	15
Stockport	2	2	4	5	10	7	7
Tameside	1	3	1	1	8	7	6
Trafford	3	7	1	1	1	0	0
Wigan	0	1	0	0	2	0	0
Total	13	27	44	45	108	78	73

Table 2-9 - Max CAP NO₂ Concentrations (µg/m³), 2018 - 2024

Authority	2018	2019	2020	2021	2022	2023	2024
Bolton	54	64	46	48	44	43	40
Bury	48	62	38	44	45	43	40
Manchester	71	76	50	56	65	59	59
Oldham	0	54	39	45	45	42	42
Rochdale	0	61	49	45	41	39	36
Salford	47	67	40	45	45	43	39
Stockport	62	75	46	52	51	50	48
Tameside	56	56	43	48	48	47	41
Trafford	47	47	35	37	35	34	30
Wigan	0	45	31	33	45	47	42
Max	71	75	50	56	65	59	59

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

This section sets out the monitoring undertaken within 2024 by the 10 GM authorities and how it compares with the relevant air quality objectives (AQO). In addition, monitoring results are presented for a five-year period between 2020 and 2024 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

GM undertook automatic (continuous) monitoring at 24 sites during 2024. Table A.1 in Appendix A shows the details of the automatic monitoring sites. Local authorities do not have to report annually on the following pollutants: 1,3 butadiene, benzene, carbon monoxide and lead, unless local circumstances indicate there is a problem. The [Clean Air GM Data Hub \(link in text\)](#) page presents automatic monitoring results for Greater Manchester, with automatic monitoring results also available through Air Quality England ([Link to Air quality in England](#)) and the UK Air website ([Link to UK Air website](#)).

Maps showing the location of monitoring sites are provided in Appendix D: Maps of Monitoring Locations and AQMAS and in more detail on [the Clean Air GM website here](#), where the locations of the CAP monitoring sites can also be found. Further details on how the monitors are calibrated and how the data has been adjusted are included in Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC.

3.1.2 Non-Automatic Monitoring Sites

GM undertook non-automatic (i.e. passive) monitoring of NO₂ at 383 sites during 2024. Table A.2 in Appendix A presents the details of the non-automatic sites.

The NO₂ monitoring programme is subject to continual review to ensure the most comprehensive coverage and representative data collection. As part of this process, the number of NO₂ diffusion tube monitoring locations can vary between years.

Where a local authority has made a change to the number of non-automatic monitoring locations since the last ASR, it is summarised in Table 3-1 with further detail provided in Section 3.2.1.

Table 3-1 – Summary of Changes in Non-automatic Monitoring Locations for 2024

District	New Locations	Reason	Retired Locations	Reason
Bolton	BOA120	Supporting a School Street	N/A	N/A
Manchester	N/A	N/A	MA8ANO, MA28NO, MA36NO, MA74NO, MA78NO, MA79NO, MA80NO, MA86ANO, MA87ANO, MA89ANO, MA94BNO, MA97BNO, MA98BNO	Long-term compliance with NO ₂ AQO
Oldham	OLSMWNO, OLLSNO, OLSWNO	To monitor levels before highway changes in area.	OLOBNO	Re-sited due to antisocial behaviour
Salford	SA90, SA91, SA92 & SA93	Replacement following works and Co-location with Regent Road automatic monitor.	SA39, SA53, SA62, SA81, SA88	Superseded by more relevant location or long-term compliance with NO ₂ AQO
Trafford	N/A	N/A	TR30NO, TR32NO	Long-term compliance with NO ₂ AQO
Wigan	N/A	N/A	WI243NO	Long-term compliance with NO ₂ AQO

Maps showing the location of monitoring sites are provided in [Appendix D: Maps of Monitoring Locations and AQMAs](#) and in more detail on [the Clean Air GM website here](#), under the Local Air Quality Management tab. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments and any other adjustments applied (e.g. annualisation and/or distance correction), are included in [Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC](#).

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, annualisation (where the annual mean data capture is below 75% and greater than 25%), and distance correction. Further details on adjustments are provided in [Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC](#).

3.2.1 Nitrogen Dioxide (NO₂)

Table A.3 and Table A.4 in Appendix A compare the ratified and adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40 µg/m³. Note that the concentration data presented represents the concentration at the location of the monitoring site, following the application of bias adjustment and annualisation, as required (i.e. the values are exclusive of any consideration to fall-off with distance adjustment).

For diffusion tubes, the full 2024 dataset of monthly mean values is provided in Appendix B. Note that the concentration data presented in Table B.1 includes distance corrected values, only where relevant.

Table A.5 in Appendix A compares the ratified continuous monitored NO₂ hourly mean concentrations for the past five years with the air quality objective of 200 µg/m³, not to be exceeded more than 18 times per year.

It should be noted that the five-year data comparison includes 2020 and 2021, which were affected by COVID-19 pandemic travel restrictions. Nitrogen dioxide concentrations during the lockdown period were lower than would be expected with no restrictions in place. As travel restrictions eased from late 2021, transport emissions began to rise back to normal levels, explaining the increase in concentrations in the years following 2020. NO₂ data for discontinued monitoring locations and from prior to 2020 is available in previous Annual Status Reports published on [the Clean Air GM Data Hub \(link in text\)](#).

3.2.1.1 Bolton Metropolitan Borough Council

Automatic Monitoring

Nitrogen dioxide levels are monitored at the automatic station on the A579, Derby Street near the University of Bolton (BOL03), just outside the town centre. The site was commissioned in October 2020. The site is located within the Air Quality Management Area and is in a roadside location. The NO_x analyser is a Teledyne API NO_x chemiluminescence analyser (Model T200) supplied by Enviro Technology services Ltd.

In 2024, the annual mean concentration measured at the site was 19.9 µg/m³. In 2023, it was 21.4 µg/m³, in both 2022 and 2021 it was 23 µg/m³, there is a slight downward trend over the years the site has been operating. There have been no hourly mean concentrations above 200 µg/m³ since the site has been operating. In 2024, the 99.8th percentile NO₂ concentration was 83 µg/m³. The site data capture was 99.76%. There were no exceedances of the nitrogen dioxide air quality objectives in 2024.

Diffusion Tubes

In 2023, Bolton Council collected data from 54 diffusion tube (49 locations as there are some duplicate/triplicate tubes). A total of 37 locations (40 tubes) are within the AQMA, with 12 locations (14 tubes) outside it.

Results are available for each month of the year, however due to issues with postage, for some months diffusion tubes exceeded the recommended use by date which may affect

the analytical procedures. Results from these tubes were removed from the dataset and, where appropriate, the locations have been annualised. This means that data may be compromised for some months. When including results from the full data set, there is little difference between the annualised and non-annualised data (data not shown).

There were no exceedances of the annual mean in 2024. In 2023, one site recorded a concentration above $40 \mu\text{g}/\text{m}^3$. Site BO71 recorded the highest measured concentration in Bolton with a concentration of $31.6 \mu\text{g}/\text{m}^3$ in 2024 (annualised and bias adjusted), in 2023 the measured concentration was $40.4 \mu\text{g}/\text{m}^3$. BO71 is located at M61 Junction 4 northbound, at traffic lights on the roundabout from the exit slip road; although there is a footpath, the nearest sensitive receptor where there would be long-term exposure is around 300 m away. In 2022, the concentration at this site was $39.7 \mu\text{g}/\text{m}^3$.

No sites in 2024 operated by Bolton Council recorded annual concentrations greater than $35 \mu\text{g}/\text{m}^3$, this is a reduction from 4 sites in 2023 and 6 sites in 2022. Between 2023 and 2024, where results are available for both years, there was a reduction in concentrations at most sites (based on annualised results), with increases at 6 locations (range of increase $0.1 - 0.5 \mu\text{g}/\text{m}^3$).

The highest monthly reading was at BOA119 (Marsden Road) in November, more than double the concentration of other months. It is unclear if this reading was elevated by the effects of nearby building work, or an anomalous result. Unfortunately, due to the issues encountered it could not be compared to preceding months. As such, it was decided to keep it in the full dataset as a precaution.

Overall, between 2024 and 2023, there was a decrease in NO_2 concentrations across Bolton, this continues reductions seen since 2022.

3.2.1.2 Bury Metropolitan Borough Council

Automatic Monitoring

Bury Council operate four automatic monitoring units at Whitefield (BURW - A56, Bury New Road), Radcliffe (BUR1 - A665 Water Street), Prestwich (BUR2 - A56 Bury New Road) and Bury Bridge (BUR03 - A58 Bolton Street). All Bury's automatic sites are located at the side of busy roads to monitor compliance with Local Air Quality Management objectives and with the government directive to meet NO_2 limit values in the shortest time possible.

Nitrogen dioxide concentrations measured at the automatic sites are well below the nitrogen dioxide annual mean objective and all sites have shown a small decrease which continues the downward trend of recent years.

Diffusion Tubes

Bury Council has a network of 20 diffusion tube sites which are located to monitor exposure close to our busier roads in relation to Local Air Quality Management responsibilities and to monitor progress towards the government directive to meet NO₂ targets in the shortest time possible. Of our 20 sites, 17 are in the AQMA. Diffusion tube collection was in-line with the calendar; however, the December collection was missed due to work pressures. This year no tubes exceeded the annual mean objective which is a continuation of the situation last year.

Both tubes that exceeded or were close to exceeding in 2022, i.e. BU15 (Junction at Bury Old Road and Bury New Road, Whitefield) and the nearby tube at BU16 (Bury New Road Whitefield) (both close to Junction 17 of the M60), showed continued reductions. 18 diffusion tube sites showed a reduction in annual mean NO₂ measured which is encouraging. One site stayed the same (BU8, Walmersley Road) and one increased by 0.5 µg/m³ (BU2, Ramsbottom Lane, Ramsbottom). BU12, Rochdale Road, was the highest measurement recorded at 36.4 µg/m³, this is a decrease from last year but suggests that Rochdale Road is potentially the main route of concern currently.

Overall, across Bury since 2021, there has been a downward trend in nitrogen dioxide at the roadside, though some sites are beginning to plateau. These sites will continue to be monitored over the 2025 reporting period to allow for sufficient data collection and enable long-term post-COVID trends to be identified.

3.2.1.3 Manchester City Council

Automatic Monitoring

During 2024, data was gathered from four automatic monitoring stations within Manchester's district:

- Piccadilly Gardens (MAN3, Urban Centre – maintained by MCC for Defra's Automatic Urban and Rural Network)
- Oxford Road (MAN1, Kerbside)
- Manchester Sharston (MAHG, Suburban Industrial)

- Bridge Street (MAN09, Kerbside - City centre site added Sept 2022 to support Clean Air Plan)

Long-term concentrations of NO₂ have fallen at three Manchester automatic monitoring sites. During 2024, the Piccadilly Gardens and Sharston sites were below the NO₂ annual average air quality objective (40 µg/m³) at 27.0 µg/m³ and 14.2 µg/m³ respectively. At 44.2 µg/m³, the Oxford Road site exceeded the limit, as did the Bridge Street (CAP) site at 51.9 µg/m³.

The Piccadilly Gardens site maintained 2023 levels of NO₂, Oxford Road experienced an increase of 3.3 µg/m³ (from 40.9 µg/m³ in 2023), and slight decreases were seen at Sharston of 0.5 µg/m³ (from 14.7 µg/m³) and Bridge Street of 1.6 µg/m³ (from 53.5 µg/m³), in 2023. There were no exceedances of the hourly average air quality objective for NO₂ during 2024.

The 2024 results demonstrate that parts of Manchester close to main arterial routes, particularly those subject to significant bus use, remain above the annual limit for NO₂.

Technical issues were experienced at the Oxford Road automatic monitoring site during 2024 (a new air conditioning unit was required), however, the site still achieved rates of data capture required by Local Air Quality Management Technical Guidance (TG22, August 2022). All other automatic sites had high rates of data capture.

Diffusion Tubes

Monitoring was carried out at 27 NO₂ diffusion tube sites in Manchester during 2024. This represented a reduction from 40 sites in 2023 due to long-term compliance at 13 sites. Three sites remained co-located with reference analysers at the automatic monitoring stations for diffusion tube bias adjustment purposes. Of the 27 sites, 25 are located within the AQMA and 2 are outside.

During 2024, there were exceedances of the annual average limit for NO₂ at the following two sites, which are within the AQMA:

- Oxford Street (site ref: MA29ANO): 51.3 µg/m³
- Oxford Road triplicate site (MA82NO, MA83NO, MA84NO): average 41.7 µg/m³ (the automatic site where the diffusion tubes are co-located measured 44 µg/m³).

The highest NO₂ concentration in Manchester measured at a LAQM diffusion tube site was at the Oxford Street site. This site experienced an increase in annual mean NO₂ concentration over the previous five years (0.7 µg/m³ since 2023). All other Manchester

monitoring sites continue a long-term downward trend, though at some locations the decrease is beginning to slow or stabilise. Manchester will benefit from the completion of bus franchising in 2025 and the introduction of lower emission vehicles along key routes in the city centre (such as Oxford Road/Oxford Street corridor). Trends will continue to be monitored to identify if this contributes to further decreases in NO₂.

3.2.1.4 Oldham Metropolitan Borough Council

Automatic Monitoring

There is one automatic nitrogen dioxide monitor for Oldham, situated roadside on Crompton Way in Shaw (CW). In 2024, it measured nitrogen dioxide levels for 95% of the year. The annual average measured was 20.2 µg/m³, i.e., well below the objective of 40 µg/m³ and less than the 2023 figure of 21 µg/m³, 24 µg/m³ in 2022 and 25 µg/m³ in 2021. There does appear to be a steady decline in levels year on year. There were no recorded incidents of the hourly average exceeding the 200 µg/m³ objective.

Diffusion Tubes

In 2024, there were initially 29 diffusion tube sites measuring NO₂ deployed by Oldham Council, this was the same as 2023. However, in June 2024 a further 3 tubes were added around the Saint Mary's Way area to monitor NO₂ levels before major highway changes in this area.

15 diffusion tubes were inside the Air Quality Management Area and 17 outside. In 2024, one site exceeded the annual air quality objective of 40 µg/m³. The site (OL21SRNO - Shaw Road, Royton) is in an Air Quality Management Area and recorded 41.3 µg/m³, with a distance corrected result of 39.9 µg/m³. The road where the tube is situated is used by Heavy Goods Vehicles as they visit the industrial areas off Salmon Fields and Higginshaw Lane in Royton and frequently has standing traffic at lights in the area. The result is lower than the 45 µg/m³ recorded in 2023.

The greatest decrease of 10 µg/m³ was seen at Broadway (OLOBNO). This tube was re-sited due to antisocial behaviour and low data collection during the 2023-2024 monitoring periods, which could affect the results. It will be kept under review for 2025.

Overall, across Oldham since 2021, there has been a downward trend in nitrogen dioxide at the roadside. There are insufficient data for four newer locations over the preceding years from which to draw conclusions. Sites will be continued to be monitored over the

2025 reporting period to allow sufficient data collection and enable identification of long-term trends.

3.2.1.5 Rochdale Metropolitan Borough Council

Automatic Monitoring

Rochdale BC has one automatic monitoring station installed in August 2021. The station is located roadside on a grass verge adjacent to A664 Queensway, close to the A627(M) leading to the M62 and A664 Edinburgh Way (RDL001). The site is located close to residential buildings with the nearest receptor 15 m away from the monitoring station.

The station monitors nitrogen dioxide, PM₁₀ and PM_{2.5}.

2024 monitoring results for NO₂ show that levels have not exceeded “Low” on the Daily Air Quality Index. The annual mean is 23.2 µg/m³, this is a reduction on the mean from 2023 which was 25.7 µg/m³ and from 27 µg/m³ in 2022 (the first full year of operation). The hourly maximum concentration was measured at 105.2 µg/m³ which is well below the maximum limit of 200 µg/m³.

Diffusion Tubes

Rochdale BC has 29 tubes located at 27 locations, with three tubes co-located with the automatic monitoring station. There have been no additional tubes placed during 2024. During the year, there have been various operational issues with deployment of the diffusion tubes and therefore there is no information available for some locations. Of the remaining diffusion tubes there are no exceedances of the annual limit of 40 µg/m³.

The highest result recorded of 30.2 µg/m³ came from tube number RO20ANO at Manchester Road, Heywood which is located close to a new link road, linking M62 to Heywood Industrial Park. The increase of 0.6 µg/m³ at RO20ANO was expected as the Heywood link road continues to remove traffic from the centre of Heywood, allowing HGV/LGV vehicles direct access from the motorway to their destination.

The large decrease observed at RO20ANO, was likely affected by low data collection and a higher than expected monthly reading in December for the 2023 monitoring period. Results for 2024 are more complete with an annual mean of 24.5 µg/m³. The site will be kept under review during the 2025 monitoring period, to identify long term trends.

Across the borough there has been a general improvement in air quality over the past five years, as shown by the results of the diffusion tubes. Though three tube sites

exceeded the 2023 results. The greatest increase in diffusion tube data was $3.4 \mu\text{g}/\text{m}^3$ at the triplicate, co-located site (RO29ANO, RO30ANO, RO31ANO), this is opposite to the decrease seen at the continuous analyser. However, at $26.5 \mu\text{g}/\text{m}^3$ it is well below the NO_2 annual limit value. Diffusion tube RO5ANO (Mossway, Middleton) had a $0.9 \mu\text{g}/\text{m}^3$ increase in 2024, it will be monitored during 2025 to see if this trend continues.

3.2.1.6 Salford City Council

Automatic Monitoring

In 2024, there were four automatic air quality monitoring sites operating in Salford that measured NO_2 concentrations:

- Eccles – an urban background site forming part of the UK AURN located close to Eccles town centre, operational since 1997 (ECCL).
- M60 – a roadside monitoring site located close to the M60 in Worsley, operational since 1999 (M60).
- Glazebury – a rural background site forming part of the UK AURN, operational since 2004 (GLAZ).
- Regent Road – a roadside site located close to the A57 Regent Road and set up to monitor the success of the GM Clean Air Plan at a critical point of exceedance, operational since September 2023 (SAL001).

At the Eccles monitoring site, the 2024 annual mean NO_2 concentration decreased by $1.6 \mu\text{g}/\text{m}^3$ (8%) compared to 2023 (2024 = $18.0 \mu\text{g}/\text{m}^3$, 2023 = $19.6 \mu\text{g}/\text{m}^3$).

At the M60 monitoring site, the 2024 annual mean NO_2 concentration decreased by $1.9 \mu\text{g}/\text{m}^3$ (6%) compared to 2023 (2024 = $31.5 \mu\text{g}/\text{m}^3$, 2023 = $33.4 \mu\text{g}/\text{m}^3$).

At the Glazebury monitoring site, the 2024 annual mean NO_2 concentration decreased by $0.9 \mu\text{g}/\text{m}^3$ (7%) compared to 2023 (2024 = $11.2 \mu\text{g}/\text{m}^3$, 2023 = $12.1 \mu\text{g}/\text{m}^3$).

At the Regent Road monitoring site, the 2024 annual mean NO_2 concentration was the same as for 2023 (both years measured an annual average NO_2 concentration of $32 \mu\text{g}/\text{m}^3$, although the 2023 concentration was annualised due to relatively low data capture for the year and so should be considered indicative).

The Eccles site showed the biggest percentage decrease in terms of NO_2 annual mean concentration in 2024 compared to 2023.

Monitoring data has shown an overall downward trend in annual mean NO₂ concentrations at the Eccles, M60 and Glazebury automatic monitoring sites in recent years. This downward trend has been particularly noticeable at the M60 site (2019 annual mean NO₂ concentration = 44 µg/m³).

There were no exceedances of the annual mean or hourly national air quality objectives for NO₂ at any of the Salford automatic monitoring sites during 2024.

All Salford automatic monitoring sites had very high rates of NO₂ data capture during 2024 (all achieved 95% or above) and there were no significant technical issues.

Diffusion Tubes

In 2024, there were 45 NO₂ diffusion tube air quality monitoring sites operated by Salford City Council, including those sites that were co-located with automatic monitoring sites for bias adjustment purposes. The local authority diffusion tube network was reviewed in late 2023 to ensure that the network remained fit for purpose and monitored NO₂ concentrations at appropriate roadside and background locations, considering:

- National LAQM air quality objective and the Air Quality Standards Regulations 2010 exceedance locations.
- Diffusion tube siting criteria set out in Defra LAQM.TG22 technical guidance and the Air Quality Standards Regulations 2010.
- Previous diffusion tube monitoring results.
- Co-location with automatic monitoring sites to improve the diffusion tube annual bias adjustment factor.

The review resulted in several changes being made to the Salford City Council NO₂ diffusion tube monitoring network from 2024. Four diffusion tubes were discontinued from the network:

- SA53 Ryecroft Lane - Another diffusion tube (SA63 Greenacre Lane) was located nearby in a location where higher NO₂ concentrations may be expected. Therefore, SA63 Greenacre Lane site took precedence over SA53 Ryecroft Lane.
- SA62 Maurice Drive/Maurice Street - Another diffusion tube site (SA26 Halton Bank substation) was located nearby in a similar type of setting. The SA26 Halton Bank substation diffusion tube site would take precedence over SA62 Maurice Drive/ Maurice Street site because it has typically experienced higher NO₂ concentrations.

- SA81 Regent Road 2 - An automatic NO_x monitoring site (Salford Regent Road) was installed nearby from September 2023. The automatic monitoring site uses a reference standard chemiluminescent NO_x analyser; results will be more accurate than and take precedence over the SA81 diffusion tube result.
- SA88 Russell Street - The diffusion tube was set up in November 2021 to address residents' concerns about poor air quality in the area. The diffusion tube results for this location demonstrated comfortable compliance with the NO₂ annual air quality objective for 2 years therefore, this air quality monitoring project is now complete.

Four diffusion tubes were added into the network:

- SA90 Trafford Road – This site was added into the network to replace a previous monitoring site (SA71 Trafford Road) that had been suspended since July 2022 due to road network improvement works taking place and the removal of street furniture where the diffusion tube was attached.
- Three diffusion tubes were co-located with the Salford Regent Road automatic NO_x monitoring site (SA91, SA92 & SA93) for bias adjustment purposes.

No results were available from the SA39 Trinity Way/Chapel Street monitoring site because it was not accessible during 2024 due to construction works taking place on façade of building where diffusion tube is located.

Overall, this resulted in a slight reduction in the number of diffusion tubes sites compared to 2023 (48 sites were operational in 2023).

During 2023, 33 diffusion tube sites were within the AQMA, and 12 sites were outside the AQMA.

41 diffusion tube monitoring sites that were not co-located with an automatic monitoring site had annual mean results available for 2024. 40 of these sites had data from 2023 to make a comparison between 2023 and 2024 annual mean monitoring results. Almost all (39) of the sites had decreased annual mean concentrations in 2024 compared to 2023.

Only one site had a slightly increased annual mean NO₂ concentration in 2024 compared to 2023, SA73 Worsley Brow (2024 = 31.1 µg/m³, 2023 = 29.4 µg/m³). Decreases in annual mean concentrations at other monitoring sites from 2023 to 2024 ranged between 0.6% and 16%.

In 2024, no Salford City Council diffusion tube sites measured annual mean NO₂ concentrations that exceeded the air quality objective of 40 µg/m³ after bias adjustment.

Data capture at all monitoring sites exceeded 75% and therefore no annualisation of results was required.

The highest diffusion tube annual mean NO₂ concentration measured in Salford during 2024 was 38.9 µg/m³ after bias correction at the SA86 Bury Old Road site. This is adjacent to the AQMA and approximately 0.5 m away from the kerb edge along the busy A665 Bury Old Road. After distance correction using the Defra Diffusion Tube Data Processing Tool, the 2024 annual mean NO₂ concentration is calculated to be 29.7 µg/m³ at the nearest relevant receptor, which does not exceed the annual mean NO₂ national air quality objective.

The lowest diffusion tube annual mean NO₂ concentration measured in Salford during 2024 was 12.5 µg/m³ at the SA01NO Irlam Locks site – an urban background location. This monitoring site has historically measured relatively low annual mean NO₂ concentrations.

Where longer term trends are available for roadside monitoring sites within the AQMA, there is an overall general downward trend in concentrations over time. This trend is also apparent for urban background monitoring sites.

3.2.1.7 Stockport Metropolitan Borough Council

Automatic Monitoring

Stockport Council operate two continuous automatic stations which monitor concentrations of nitrogen dioxide within the district. The monitoring stations are operated to national AURN standards and are located at:

- A34 Cheadle, a roadside monitoring site at the junction with the A560 (SK7)
- A6 Hazel Grove, a roadside monitoring site (STK5).

The annual average level of nitrogen dioxide as measured at the Cheadle air quality monitoring station in 2024 was 24.9 µg/m³, this level is significantly below the national annual objective level of 40 µg/m³. The annual average level measured in 2024 showed a decrease of 0.7 µg/m³ in roadside levels of nitrogen dioxide when compared against 2023 (2024 = 24.9 µg/m³, 2023 = 25.6 µg/m³) at this location. The air quality data from

the Cheadle A34 monitoring station confirms that the national average annual and hourly objective for levels of nitrogen dioxide were not exceeded in 2024.

The annual average level of nitrogen dioxide as measured at the Hazel Grove air quality monitoring station in 2024 was $16 \mu\text{g}/\text{m}^3$, this level is significantly below the annual objective level of $40 \mu\text{g}/\text{m}^3$. The annual average level measured in 2024 showed a decrease of $0.7 \mu\text{g}/\text{m}^3$ in roadside levels when compared against 2023 (2024 = $16 \mu\text{g}/\text{m}^3$, 2023 = $16.7 \mu\text{g}/\text{m}^3$). Air quality data from the Hazel Grove station confirms there were no exceedances of the average annual or hourly objective levels for NO_2 in 2024.

The previous five years of data from the Stockport monitoring stations have shown an overall downward trend in annual mean nitrogen dioxide concentrations. The downward trend extends beyond 2020 as demonstrated at the Cheadle A34 site (2019 annual mean NO_2 concentration = $36 \mu\text{g}/\text{m}^3$).

No significant technical issues were experienced at Stockport monitoring sites during 2024 with respect to nitrogen dioxide and the sites had high rates of data capture. Both the monitoring stations were subject to regular servicing, calibration and the data collected is subject to quality control and assurance.

Diffusion Tubes

In 2024, Stockport Metropolitan Borough Council operated 34 diffusion tubes in 29 locations around the Local Authority. The network includes six co-located diffusion tubes at the automatic monitoring sites for bias adjustment purposes. No new diffusion tubes were installed in 2024. During 2024, 19 diffusion tube sites were within the AQMA, and 10 sites were outside the AQMA.

There were no exceedances of the annual mean objective for nitrogen dioxide at the sites monitored by Stockport Council.

Annual mean concentrations recorded at Stockport diffusion tubes ranged from $5.9 \mu\text{g}/\text{m}^3$ (ST5NO) to $32.6 \mu\text{g}/\text{m}^3$ (ST36NO). The highest concentration was measured at a roadside site on the A6 within Stockport town centre (ST36NO). However, this monitoring location has shown a slight reduction on the annual average level in 2023 of $34.3 \mu\text{g}/\text{m}^3$.

One diffusion tube location recorded a higher concentration when compared against the previous year, with an increase of $0.4 \mu\text{g}/\text{m}^3$ (ST6NO), which is not significant. Overall

diffusion tube monitoring within Stockport shows a continuing downward trend in the recorded levels of nitrogen dioxide over the previous five years.

3.2.1.8 Tameside Metropolitan Borough Council

Automatic Monitoring

Automatic monitoring for nitrogen dioxide was undertaken at two roadside sites during 2024, located at:

- A57 Mottram Moor, Hollingworth (TAM1)
- A635, Manchester Road, Ashton-under-Lyne (TS001).

Over the past six years concentrations at the Mottram Moor site have, in general, fallen from 40 $\mu\text{g}/\text{m}^3$ in 2019 to 29.7 $\mu\text{g}/\text{m}^3$ in 2024. It is 3 $\mu\text{g}/\text{m}^3$ lower than the 2023 annual average of 32.9 $\mu\text{g}/\text{m}^3$.

Concentrations at the A635 Manchester Road site have also been falling, from 34 $\mu\text{g}/\text{m}^3$ in 2021 to 29.1 $\mu\text{g}/\text{m}^3$ in 2024, down 1 $\mu\text{g}/\text{m}^3$ from the 2023 annual average of 30 $\mu\text{g}/\text{m}^3$.

Neither site exceeds the annual mean objective for nitrogen dioxide and there were no recorded incidents of the hourly average exceeding the 200 $\mu\text{g}/\text{m}^3$ objective.

Diffusion Tubes

The number of nitrogen dioxide diffusion tube monitoring sites within the borough during 2024 was 53. Of these 53 sites, 30 are inside the AQMA boundary and 23 are outside. All 53 sites had an annual average below the annual mean objective of 40 $\mu\text{g}/\text{m}^3$.

Concentrations of nitrogen dioxide inside the AQMA have, in general, shown a downward trend over the past five years. The three sites which recorded an exceedance of the 40 $\mu\text{g}/\text{m}^3$ annual mean objective in 2023, were compliant in 2024. These were, TA55 (Manchester Rd, Ashton-under-Lyne) annual average of 37.3 $\mu\text{g}/\text{m}^3$ (45.2 $\mu\text{g}/\text{m}^3$, 2023), TA47 (Triplicate Site Mottram Moor, Hollingworth) annual average of 35.6 $\mu\text{g}/\text{m}^3$ (40.9 $\mu\text{g}/\text{m}^3$, 2023) and TA11 (Market Street, Hollingworth) annual average of 38.4 $\mu\text{g}/\text{m}^3$ (43.2 $\mu\text{g}/\text{m}^3$, 2023). Outside the AQMA no sites had an annual average of greater than 40 $\mu\text{g}/\text{m}^3$ and all sites show a general downward trend over the past five years.

The highest annual average nitrogen dioxide concentration was 38.4 $\mu\text{g}/\text{m}^3$, recorded on Market Street in Hollingworth (TA11NO).

3.2.1.9 Trafford Metropolitan Borough Council

Automatic Monitoring

Trafford Council operate three continuous automatic monitoring stations within the district. The monitoring stations are operated to national AURN standards and are located at:

- Stretford A56, adjacent to Stretford House, M32 9AZ (TRF2)
- Wellacre Academy, Irlam Rd, Urmston, Manchester M41 6AP (TRF3)
- Moss Park Junior School, Moss Park Rd, Stretford, Manchester M32 9HR (TRAF)

No new sites were installed in 2024.

All three sites continue to record decreases in annual mean NO₂ concentrations. The annual average concentration of nitrogen dioxide measured at the A56 continuous monitor was 20.2 µg/m³, annual statistics are shown in Table 3-2. The 2024 concentration is significantly below the national annual objective level and a reduction of 0.5 µg/m³ on the 2023 level, a reduction of 4 µg/m³ on the 2022 level (24 µg/m³) and 3 µg/m³ lower than the 2021 level (23 µg/m³). Air quality data from the A56 station confirms that the hourly annual objective for levels of nitrogen dioxide was not exceeded in 2024.

Background levels, as measured at the Wellacre and Moss Park stations, similarly remained significantly below the annual objective level (Table 3-3 and Table 3-4).

There were no areas of concern in 2024. All monitoring stations were subject to regular servicing, calibration and the data collected is subject to quality control and assurance.

The only technical issue in 2024 was that the cabin of the Moss Park station developed a leak and as a safety measure the unit was shut down. A contractor has been instructed, and works will be undertaken, it is anticipated the station will be operational around Easter 2025. As data capture for this monitor was less than 75%, these data have been annualised (Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC).

Table 3-2 - Trafford A56 (TRF2): Annual statistics for 2024.

	Concentration 9. (µg/m ³)	Data Capture
Annual Hourly Mean	20.2	96%
Max Daily Mean	63	96%
Max Hourly Mean	98	96%

Table 3-3 - Trafford Moss Park (TRAF): Annual statistics for 2024.

	Concentration ($\mu\text{g}/\text{m}^3$)	Data Capture
Annual Hourly Mean	12.4	70%
Max Daily Mean	57	70%
Max Hourly Mean	77	70%

Note:

Annualisation has been conducted as data capture is <75% in line with LAQM.TG22

Table 3-4 - Trafford Wellacre Academy (TRF3): Annual statistics for 2024.

	Concentration ($\mu\text{g}/\text{m}^3$)	Data Capture
Annual Hourly Mean	10.6	96%
Max Daily Mean	53	96%
Max Hourly Mean	79	96%

Diffusion Tubes

In 2024, Trafford Council had a diffusion tube network comprising twenty-one diffusion tubes, located at 14 locations, this compares to twenty-three tubes at 16 locations in 2023. At the site of the council's automatic monitoring stations, three diffusion tubes are co-located to assist with bias adjustment calculations.

In 2024, 9 diffusion tubes at six locations were positioned within or close to the Air Quality Management Area. 12 diffusion tubes at eight locations are positioned outside of the council's Air Quality Management Area.

In 2024, the diffusion tube location recording the highest concentration was TR31NO (Carrington Spur, Sale), which recorded a concentration of $25.4 \mu\text{g}/\text{m}^3$. This site recorded an annual mean concentration of $27.7 \mu\text{g}/\text{m}^3$ in 2023.

All diffusion tubes continue the long term trend of decreasing annual mean NO_2 concentrations, though TR28NO (Stamford New Rd, Altrincham) now appears to be stabilising.

3.2.1.10 Wigan Metropolitan Borough Council**Automatic Monitoring**

Wigan has two automatic monitoring stations. The Wigan Centre (WIG5) automatic monitoring site is an urban background site located at the Deanery High School on Frog Lane close to Wigan town centre. This site monitors NO_2 , PM_{10} , $\text{PM}_{2.5}$. At Wigan Centre,

the 2024 annual mean NO₂ concentration was 12.7 µg/m³. This is an improvement over the 2023 annual mean of 14.8 µg/m³ and 17 µg/m³ in 2021/22.

Wigan Leigh 3 (WIG07) monitoring station is a roadside site located on Market Street in Leigh, close to the town centre, which monitors NO₂, PM₁₀ and PM_{2.5}. The annual mean concentration for NO₂ recorded at Wigan Leigh in 2024 was 19.1 µg/m³, which is a decrease compared with the 21.4 µg/m³ recorded in 2023 and 25 µg/m³ recorded in 2021. This remains well within the legal limits. Wigan Leigh had 68% annual data capture, as this is less than 75% the data have been annualised in line with LAQM.TG22 (Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC).

Neither station recorded an exceedance of the short-term limit, and both continue to show long term reductions in NO₂.

Diffusion Tubes

In 2024 Wigan Council deployed a total of 50 nitrogen dioxide diffusion tubes at 48 locations.

The only exceedance measured in 2024 was tube WI245NO, Wallgate in Wigan, which recorded 40.7 µg/m³. This is a reduction on the 43.8 µg/m³ recorded in 2023 for this location. After distance correction using the Defra Diffusion Tube Data Processing Tool, the 2024 annual mean NO₂ concentration is calculated to be 26.5 µg/m³ at the nearest relevant receptor, which does not exceed the annual mean NO₂ national air quality objective. As this was a new site installed in 2023, long term trends are not yet available, monitoring will continue during 2025.

In 2024, tube WI180, located at Winwick Lane, recorded an annual mean of 39.1 µg/m³. This tube previously always recorded exceedances of the legal limit, and the decrease represents an improvement in air quality at this location. Camera-enforced fines were introduced in 2024 for vehicles that exceed the 7.5-tonne weight limit using the south-bound route to improve the air quality in this area. It is recognised that the 2024 national bias adjustment factor is also lower than previous years, which may affect this location. Due to the concentration being close to the annual legal limit, this site will be kept under review during the 2025 monitoring period as more location specific measures are introduced.

Overall long-term trends across Wigan show decreasing NO₂ concentrations.

3.2.1.11 Diurnal Analysis of NO₂ in Greater Manchester

Diurnal analysis of the automatic sites has been undertaken to identify daily trends in nitrogen dioxide across the year. This has been included in previous GM Annual Status Reports and allows comparisons with previous years.

The graph, shown in Figure 3-1, displays the average daily variation in NO₂ concentrations at six Greater Manchester roadside and background sites for 2024.

These are:

- Rochdale Queensway - Roadside
- Salford M60 - Roadside
- Tameside A635 - Roadside
- Manchester Sharston – Suburban Industrial
- Salford Eccles – Urban Background
- Wigan Centre – Urban Background

Most monitoring sites show a similar trend, a peak in NO₂ concentrations occurring in the morning between 08:00 and 09:00 and an evening peak between approximately 16:00 to 20:00. These peaks correspond to commuting traffic peak times.

The trends are similar to 2023 and occur across roadside and background monitoring sites. However, the peaks are generally at slightly lower concentration levels than 2023. As an example, diurnal analysis of 2023 automatic monitoring site data showed that the Salford M60 site experienced a morning NO₂ concentration peak of approximately 41 µg/m³, in 2024, the morning peak had reduced to approximately 39 µg/m³.

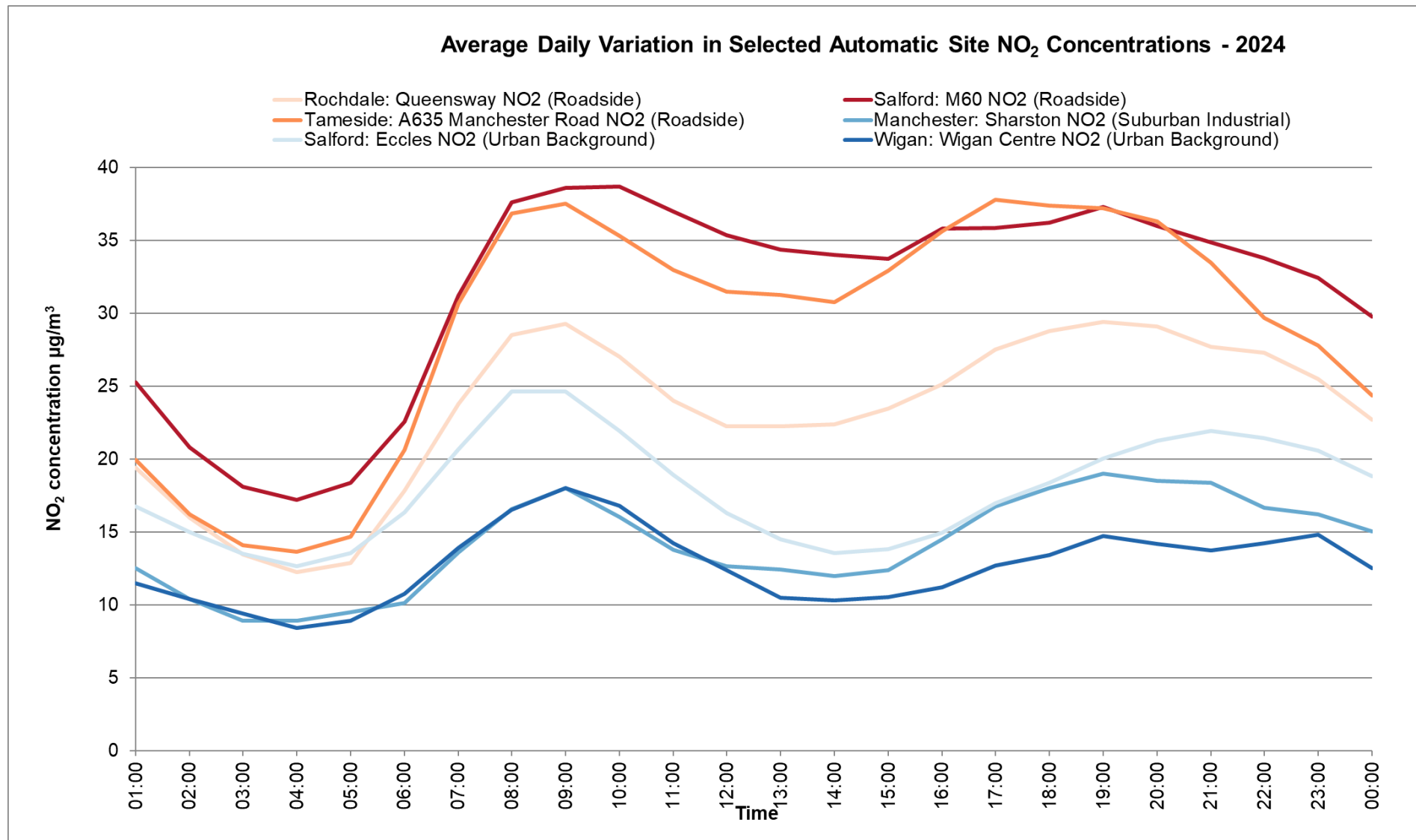


Figure 3-1 – Graph Showing Diurnal Trends in NO₂ Concentration in Selected Automatic Sites for 2024

3.2.2 Particulate Matter (PM₁₀)

Table A.6 in Appendix A: Monitoring Results compares the ratified and adjusted monitored PM₁₀ annual mean concentrations for the past five years with the air quality objective of 40 µg/m³.

Table A.7 in Appendix A compares the ratified continuous monitored PM₁₀ daily mean concentrations for the past five years with the air quality objective of 50 µg/m³, not to be exceeded more than 35 times per year.

A confirmatory check of the Defra 2021-based background maps for 2024 indicates no likely exceedances of the objective levels for PM₁₀.

3.2.2.1 Bolton Metropolitan Borough Council

Monitoring of PM₁₀ is undertaken at the site on the A579, Derby Street near the University of Bolton (BOL03), which was commissioned in October 2020. The site is in a roadside location. PM₁₀ concentrations are measured using a Beta Attenuation Mass Monitor (BAM) with a correction applied to the results to make it gravimetric equivalent.

The annual mean concentration measured at the site was 16.4 µg/m³, which is similar to 2023 and less than the 2022 concentration of 19 µg/m³. The highest daily mean was 46 µg/m³. No days recorded a daily mean above 50 µg/m³, a reduction from 1 day in 2023 and 7 days in 2022.

The data capture at the site was 75.73% as there were some faults and communication issues with the analyser during the year. No significant issues with the site were seen since the beginning of September 2024, and the issues experienced are now resolved.

There were no exceedances of the PM₁₀ air quality objectives in 2024. Since the site was commissioned in 2020, concentrations have been gradually reducing.

3.2.2.2 Bury Metropolitan Borough Council

Bury Council operate three automatic monitoring units monitoring PM₁₀ at Whitefield (BURW - A56 Bury New Road), Radcliffe (BUR1 - A665 Water Street) and Prestwich (BUR2 - A56 Bury New Road). In 2024, all units achieved data capture rates of around 98%.

Measured concentrations of PM₁₀ are well below the annual mean objective and there were no exceedances of the 24-hour mean objective. The annual mean concentrations

measured at the sites in 2024 were 16.3 $\mu\text{g}/\text{m}^3$ for Prestwich, 14.9 $\mu\text{g}/\text{m}^3$ for Radcliffe, 13.1 $\mu\text{g}/\text{m}^3$ for Whitefield. All three sites have continued the trend in annual mean concentration reduction since 2021.

Only the Prestwich site recorded a daily mean above 50 $\mu\text{g}/\text{m}^3$, a reduction from two days in 2023 and 6 days in 2022. This daily mean was recorded on 5 November and could be related to local Bonfire Night celebrations. The other two sites did not record any daily means above 50 $\mu\text{g}/\text{m}^3$ in 2024.

The 2025 results will be assessed to see if this trend is maintained.

3.2.2.3 Manchester City Council

During 2024, PM₁₀ was measured at three sites in Manchester: Oxford Road (MAN1), Piccadilly Gardens (MAN3) and Sharston (MANHG). Annual average concentrations of PM₁₀ at the Oxford Road site increased from 17.5 $\mu\text{g}/\text{m}^3$ in 2023 to 20.5 $\mu\text{g}/\text{m}^3$ in 2024. At Piccadilly Gardens and Sharston, 2023 levels were maintained at around 15 $\mu\text{g}/\text{m}^3$ and 10.7 $\mu\text{g}/\text{m}^3$, respectively. No site has exceeded the legal limit for this pollutant since the baseline year and there have been no exceedances of the 24-hour average legal limit.

Technical issues were experienced at the Oxford Road automatic monitoring site during 2024 (a new air conditioning unit was required), however the site still achieved rates of data capture required by Local Air Quality Management Technical Guidance (TG22, August 2022). All other automatic sites had high rates of data capture.

3.2.2.4 Oldham Metropolitan Borough Council

The automatic PM₁₀ monitor for Oldham is in the same location as the nitrogen dioxide monitor (CW). In 2024, it had a PM₁₀ data capture of 98%. The annual mean measured was 14.4 $\mu\text{g}/\text{m}^3$, well below the annual objective of 40 $\mu\text{g}/\text{m}^3$, a slight decrease on levels in 2023 of 14.9 $\mu\text{g}/\text{m}^3$ and lower than 18 $\mu\text{g}/\text{m}^3$ in 2022. There appears to be a gradual decrease in levels of PM₁₀ year on year. There were no exceedances of the 24-hour mean target of 50 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 35 times a year.

3.2.2.5 Rochdale Metropolitan Borough Council

Rochdale BC has one automatic monitoring station that was installed in August 2021 recording levels of PM₁₀ located on Queensway, A664 (RDL001). The monitoring shows the annual mean of PM₁₀ is 14.5 $\mu\text{g}/\text{m}^3$, against the maximum limit of 40 $\mu\text{g}/\text{m}^3$, with a data capture rate of 92%. The maximum 24-hour mean was 49.9 $\mu\text{g}/\text{m}^3$ with nothing

exceeding the low category of the Daily Air Quality Index. This daily mean was recorded on 5 November and could be related to local Bonfire Night celebrations.

2024 provided the third full year of data, and there appears to be a downward trend in levels of particulates. PM₁₀ dropped from 18 µg/m³ in 2022 and 16 µg/m³ in 2023.

3.2.2.6 Salford City Council

In 2024, there were three automatic air quality monitoring sites operating in Salford that measured PM₁₀ concentrations:

- Eccles – an urban background site located close to Eccles town centre, operational since 1997 (ECCL).
- M60 – a roadside monitoring site located close to the M60 in Worsley, operational since 1999 (M60).
- Glazebury – a rural background site, operational since May 2022 (GLAZ).

At the Eccles monitoring site, the 2024 annual mean PM₁₀ concentration increased by 0.5 µg/m³ (3%) compared to 2023 (2024 = 15.6 µg/m³, 2023 = 15.1 µg/m³).

At the M60 monitoring site, the 2024 annual mean PM₁₀ concentration decreased by 1.7 µg/m³ (9%) compared to 2023 (2024 = 16.8 µg/m³, 2023 = 18.5 µg/m³).

At the Glazebury monitoring site, the 2024 annual mean PM₁₀ concentration remained stable compared to 2023 (2024 = 10.3 µg/m³, 2023 = 10.7 µg/m³).

The last 5 years of available monitoring data has shown that annual mean PM₁₀ concentrations at the Eccles and M60 sites have remained relatively stable. The reason for the slight increase in annual mean PM₁₀ concentration at the Eccles site in 2024 compared to 2023 is unclear but could be due to meteorological variations.

There were no exceedances of either the annual mean or 24-hour national air quality objectives at these monitoring sites.

All Salford automatic monitoring sites had very high rates of PM₁₀ data capture during 2024 (all achieved 99% or above) and there were no significant technical issues.

3.2.2.7 Stockport Metropolitan Borough Council

Stockport Council operate two continuous automatic stations which monitor concentrations of particulate matter (PM₁₀) within the district. The monitoring stations are operated to national AURN standards and are located at:

- A34 Cheadle, a roadside monitoring site at the junction with the A560 (STK7)

- A6 Hazel Grove, a roadside monitoring site (STK5).

The annual average level of PM₁₀ at the Cheadle air quality monitoring station in 2024 was 12.3 µg/m³, this level is significantly below the national annual objective level of 40 µg/m³. The annual average level showed a decrease of 1 µg/m³ in roadside levels of PM₁₀ when compared against 2023 (2024 = 12.3 µg/m³, 2023 = 13.5 µg/m³). The air quality data from the Cheadle A34 monitoring station confirms that the average annual and hourly objective for levels of nitrogen dioxide were not exceeded in 2024.

The annual average level of PM₁₀ at the Hazel Grove air quality monitoring station in 2024 was 15.9 µg/m³, this level is significantly below the national annual objective level of 40 µg/m³. The annual average level showed a decrease of 1 µg/m³ in roadside levels when compared against 2023 (2024 = 15.9 µg/m³, 2023 = 17.1 µg/m³). The air quality data from the Hazel Grove station confirms that the average annual and hourly objective for levels were not exceeded in 2024.

The previous five years of data from the Council's monitoring stations demonstrate slight changes in levels of particulates PM₁₀. However, the recorded levels are significantly below the respective objective levels.

No significant technical issues were experienced at any of Stockport's monitoring sites during 2024 with respect to PM₁₀ and the sites had high rates of data capture.

3.2.2.8 Tameside Metropolitan Borough Council

Currently PM₁₀ concentrations are monitored at two locations in Tameside, at the automatic monitoring stations on Mottram Moor, Hollingworth (TAM1), and on the A635 Manchester Road, Ashton-under-Lyne (TS001). Results from both stations show an annual data capture above 90%.

The annual mean PM₁₀ concentration at Mottram Moor has shown a downward trend over the last five years, falling from 17 µg/m³ in 2020 to 13.5 µg/m³ in 2024, although there was a 2 µg/m³ increase from the annual mean of 11.3 µg/m³ in 2023.

The annual average PM₁₀ concentrations at the A635 Manchester Road site have fallen from 20 µg/m³ in 2021, (the first full year of data after the site was installed) to 16.2 µg/m³ in 2024, down 0.5 µg/m³ from the 2023 annual mean.

There were no exceedances of the annual mean or 24-hour national air quality objectives at these monitoring sites.

3.2.2.9 Trafford Metropolitan Borough Council

Trafford Council operates two continuous automatic monitoring stations within the district which monitor Particulate Matter PM₁₀. The monitoring stations are operated to national AURN standards and are located at:

- Stretford A56, adjacent to Stretford House, M32 9AZ (TRF2)
- Moss Park Junior School, 71 Rd, Stretford, Manchester M32 9H (TRAF)

Levels of Particulates PM₁₀ measured at the A56 roadside air quality monitoring station in 2024 is the same as that measured in 2023 (12.8 µg/m³), but lower than the 16 µg/m³ recorded in 2022.

Background monitoring at the Stretford Moss Park monitoring station in 2024 shows the same levels of PM₁₀ 11.2 µg/m³ when compared against 2023, but lower than the 17 µg/m³ recorded in 2022. As the data capture for this monitor was less than 75%, these data have been annualised (Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC).

Monitored levels of particulates at both stations were significantly below national objective levels and there were no exceedances of the 24-hour national air quality objective at these monitoring sites.

3.2.2.10 Wigan Metropolitan Borough Council

PM₁₀ is monitored at both Wigan Centre (WIG5) and Wigan Leigh Three (WIG07).

Wigan Leigh recorded the same levels of PM₁₀ in 2024 as was recorded in 2023, with annual means of 15.5 µg/m³.

Wigan Centre recorded a slight decrease on the levels of PM₁₀ in 2024 as was recorded in 2023, with annual means of 12 µg/m³ and 12.5 µg/m³, respectively.

Monitored levels of particulates at both stations were significantly below national objective levels and there were no exceedances of the 24-hour national air quality objective.

3.2.2.11 Diurnal Analysis of PM₁₀ in Greater Manchester

Diurnal analysis of the automatic sites has been undertaken to identify daily trends in PM₁₀ across the year.

The graph, shown in Figure 3-2, displays the average daily variation in PM₁₀ concentrations at six Greater Manchester roadside and background sites for 2024.

These are:

- Rochdale Queensway - Roadside
- Salford M60 - Roadside
- Tameside A635 - Roadside
- Manchester Sharston – Suburban Industrial
- Salford Eccles – Urban Background
- Wigan Centre – Urban Background

Most monitoring sites show a similar trend in the morning. A peak in PM₁₀ concentrations occurs from approximately 08:00. At the Salford M60 site, the peak concentrations occur between approximately 10:00 and 15:00. At the Tameside A635 Manchester Road site, the greatest concentrations occur between approximately 14:00 and 16:00.

The Salford M60 and Salford Eccles sites show a similar trend, which may reflect activity on the Strategic Road Network.

The Manchester Sharston and Wigan Centre sites also show a similar trend. A peak occurs in the morning at approximately 09:00 and again in the afternoon from approximately 17:00 to 22:00.

Overall trends in concentrations are similar to 2023.

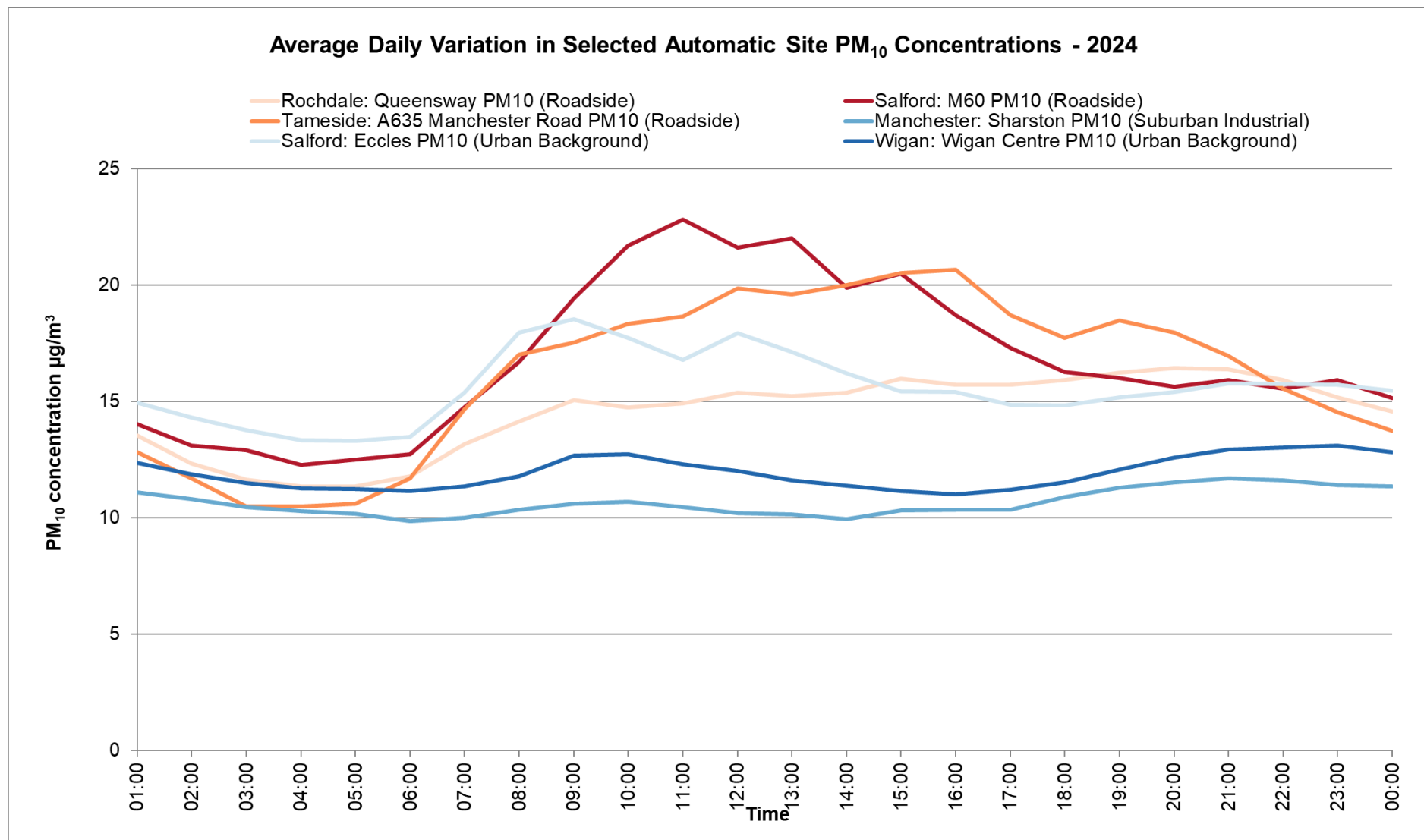


Figure 3-2 - Graph Showing Diurnal Trends in PM₁₀ Concentration in Selected Automatic Sites for 2024

3.2.3 Particulate Matter (PM_{2.5})

Table A.8 in Appendix A presents the ratified and adjusted monitored PM_{2.5} annual mean concentrations for the past five years.

All monitoring sites in GM maintain annual mean PM_{2.5} concentrations below both the 20 µg/m³ annual objective concentration and the 10 µg/m³ 2040 long term target value. A confirmatory check of the Defra 2021-based background maps for 2024 indicates no likely exceedances of the objective levels for PM_{2.5}.

3.2.3.1 Bolton Metropolitan Borough Council

Monitoring of PM_{2.5} is undertaken at the site on the A579, Derby Street near the University of Bolton (BOL03). The site is in a roadside location. PM_{2.5} concentrations are measured using a Beta Attenuation Mass Monitor (BAM).

The annual mean concentration measured at the site was 7.3 µg/m³, which is 1 µg/m³ lower than the 8.4 µg/m³ measured in 2023. In 2022 the concentration was 11 µg/m³ and in 2021 it was 10 µg/m³.

The concentration measured in both 2024 and 2023 is below the UK 2040 long-term target of 10 µg/m³, although it was above this level in 2022 and 2021. The data capture at the site was 97.1%. The site was commissioned in 2020 and since then there has been a downward trend in concentrations.

3.2.3.2 Manchester City Council

PM_{2.5} is monitored at the Piccadilly Gardens and Sharston sites. Annual average PM_{2.5} concentrations were relatively stable at both sites during 2024. At Piccadilly Gardens the level remained at 8.5 µg/m³ and at Sharston there was a slight increase from 6.4 to 6.5 µg/m³. Neither site has exceeded the legal limit for this pollutant since the baseline monitoring year.

There were no significant technical issues which affected PM_{2.5} data capture during 2024 for Piccadilly Gardens or Sharston.

3.2.3.3 Rochdale Metropolitan Borough Council

The Rochdale Queensway site (RDL001) monitors PM_{2.5}. Throughout 2024, monitoring of PM_{2.5} show the annual mean is 8.3 µg/m³, against the maximum annual limit of 20 µg/m³, with a data capture rate of 95%. The maximum hourly mean was 38 µg/m³. Levels of PM_{2.5} also dropped from 10.3 µg/m³ in 2022 and 8.9 µg/m³ in 2023, to 8.3 µg/m³ in 2024.

3.2.3.4 Salford City Council

In 2024, there were three automatic air quality monitoring sites operating in Salford that measured PM_{2.5} concentrations:

- Eccles – an urban background site located close to Eccles town centre, operational since 2008 (ECCL).
- M60 – a roadside monitoring site located close to the M60 in Worsley, operational since 2017 (M60).
- Glazebury – a rural background site, operational since May 2022 (GLAZ).

At the Eccles monitoring site, the 2024 annual mean PM_{2.5} was 9.1 µg/m³ similar to 2023 (8.6 µg/m³).

At the M60 monitoring site, the 2024 annual mean PM_{2.5} concentration decreased by 1.2 µg/m³ (14%) compared to 2023 (2024 = 7.6 µg/m³, 2023 = 8.8 µg/m³).

At the Glazebury monitoring site, the 2024 annual mean PM_{2.5} was the same as for 2023 (both years measured an annual average PM_{2.5} concentration of around 6.4 µg/m³).

The last five years of available monitoring data has shown that annual mean PM_{2.5} concentrations at the Eccles and M60 sites have remained relatively stable.

There were no exceedances of the annual mean national air quality objective at these monitoring sites.

All Salford automatic monitoring sites had very high rates of PM_{2.5} data capture during 2024 (all achieved 99% or above) and there were no significant technical issues.

3.2.3.5 Tameside Metropolitan Borough Council

PM_{2.5} concentrations are monitored at the automatic station on the A635 Manchester Road, Ashton-under-Lyne (TS001). In 2024, this site achieved an 82% data capture rate.

The annual average concentration for this site has fallen from 11 µg/m³ in 2021 to 7.8 µg/m³ in 2024, a similar concentration to the 2023 annual mean.

3.2.3.6 Wigan Metropolitan Borough Council

PM_{2.5} is monitored at both Wigan Centre (WIG5) and Wigan Leigh Three (WIG07). Data capture for both sites was above 90%.

It can be seen from the results for Wigan Centre that the same level of PM_{2.5} was recorded in 2024 as was recorded in 2023, with an annual mean of 7.5 µg/m³. For Wigan Leigh Three there was a slight increase in PM_{2.5} levels from 8.2 µg/m³ in 2023 to 8.6 µg/m³ in

2024. Both monitoring sites remain below the highest annual mean concentrations measured in 2022 of 9 $\mu\text{g}/\text{m}^3$ and 11 $\mu\text{g}/\text{m}^3$, respectively.

3.2.3.7 Diurnal Analysis of PM_{2.5} in Greater Manchester

Diurnal analysis of the automatic sites has been undertaken to identify daily trends in PM_{2.5} across the year.

The graph, shown in Figure 3-3, displays the average daily variation in PM₁₀ concentrations at six Greater Manchester roadside and background sites for 2024.

These are:

- Rochdale Queensway - Roadside
- Salford M60 - Roadside
- Tameside A635 - Roadside
- Manchester Sharston – Suburban Industrial
- Salford Eccles – Urban Background
- Wigan Centre – Urban Background

All monitoring sites show a similar trend in concentrations. A peak in PM_{2.5} concentrations occurs from approximately 07:00 to 10:00, and then another evening peak occurs from approximately 18:00 to 22:00. This trend occurs for both the roadside and background monitoring sites and could correspond to peak traffic times.

It should be noted that the Tameside A635 Manchester Road site had relatively low data capture for 2024 (82%), and so diurnal variation concentrations at this site should be considered indicative.

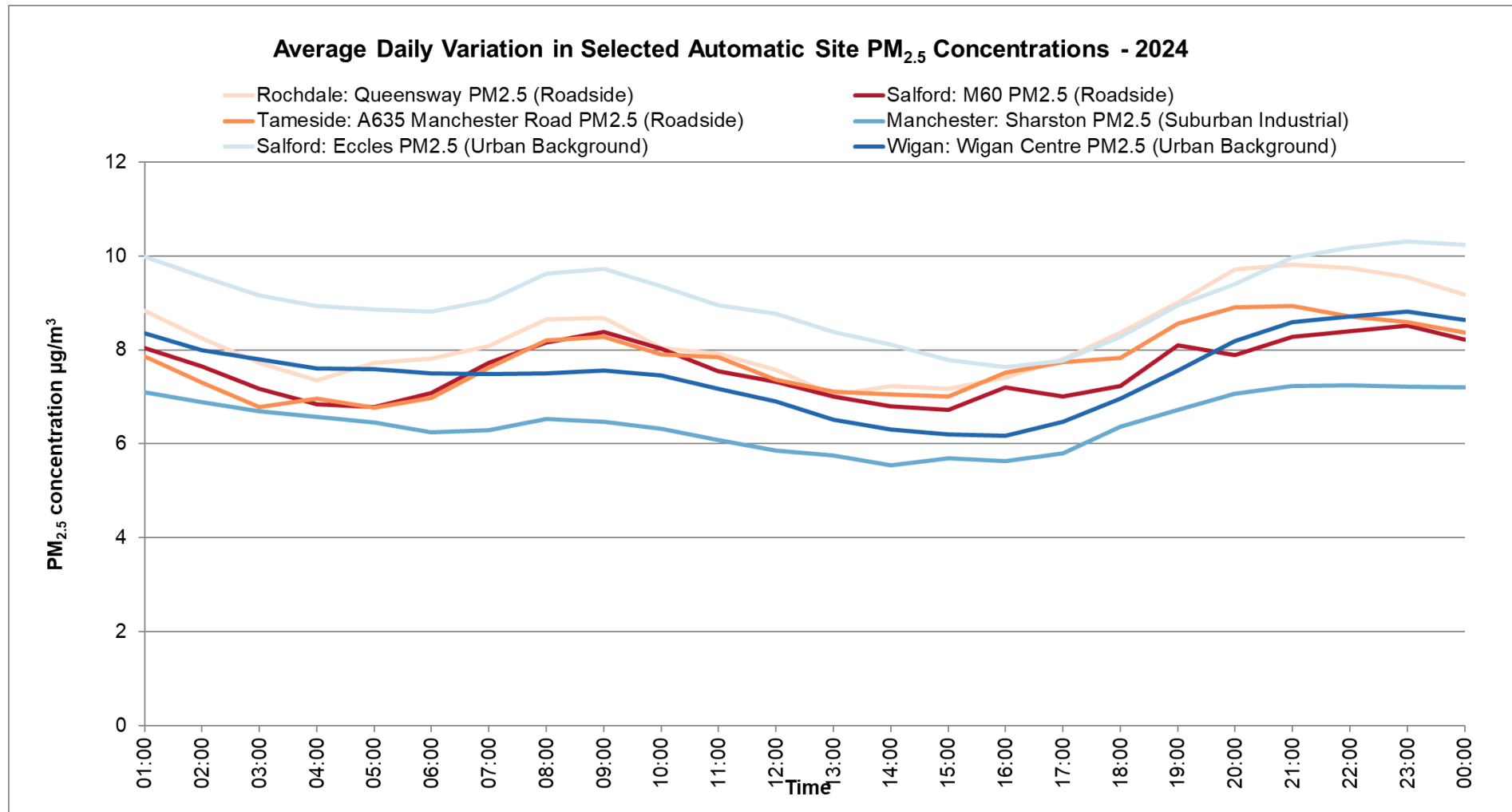


Figure 3-3 - Graph Showing Diurnal Trends in PM_{2.5} Concentration in Selected Automatic Sites for 2024

3.2.4 Sulphur Dioxide (SO₂)

Table A.9 in Appendix A compares the ratified continuous monitored SO₂ concentrations for 2024 with the air quality objectives for SO₂.

During 2024 data was recorded at two automatic monitoring stations in the district of Manchester:

- Piccadilly Gardens (Urban Centre), MAN3.
- Manchester Sharston (Suburban Industrial), MANHG.

Both sites measured a spike in SO₂ concentrations, peaking at 18:00 on 31 May. This corresponded to a national air quality episode notification based on the forecast of elevated levels of SO₂ linked to an Icelandic volcanic eruption. While elevated SO₂ concentrations were recorded for 15-minute and 1-hour means, no concentrations above 125 µg/m³ were recorded for the 24-mean.

Neither site exceeded the legal limit for this pollutant.

A confirmatory check of the Defra background maps indicates that there are no likely exceedances of the objective levels for this pollutant.

It was noted in the appraisal comments received following the 2024 ASR submission that, '13 d. *Trafford Moss Park has been noted to monitor SO₂ but is not included in table A.9. If data is available for 2023, this should be reported.*'

No SO₂ monitoring is undertaken at this location, this was a typographical error, apologies for the confusion.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Which AQMA? ⁽¹⁾	Monitoring Technique	Distance to Relevant Exposure (m) ⁽²⁾	Distance to kerb of nearest road (m) ⁽¹⁾	Inlet Height (m)
BOL03	Bolton A579 Derby Street	Roadside	371296	408600	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	2016 AQMA	Chemiluminescent & BAM	30	2.5	2
BUR03	Bury Bridge (CAP)	Roadside	379840	410944	NO ₂	Yes	2016 AQMA	Chemiluminescent	N/A	4	1.5
BUR2	Bury Prestwich	Roadside	381650	403222	NO ₂ , PM ₁₀	Yes	2016 AQMA	Chemiluminescent & BAM	15	2.5	1.5
BUR1	Bury Radcliffe	Roadside	378190	407480	NO ₂ , PM ₁₀	Yes	2016 AQMA	Chemiluminescent & BAM	10	2.5	1.5
BURW	Bury Whitefield	Roadside	380636	406973	NO ₂ , PM ₁₀	Yes	2016 AQMA	Chemiluminescent & FDMS	24	7	3
MAN09	Manchester Bridge Street (CAP)	Roadside	383556	398292	NO ₂	Yes	2016 AQMA	Chemiluminescent	N/A	0.8	1.4
MAN1	Manchester Oxford Road	Kerbside	384239	397276	NO ₂ , PM ₁₀	Yes	2016 AQMA	Chemiluminescent & BAM	5	3	2
MAN3	Manchester Piccadilly	Urban Centre	384310	398337	NO ₂ , PM ₁₀ , PM _{2.5} , O ₃ , SO ₂	Yes	2016 AQMA	Chemiluminescent, Palas Fidas, UV absorption & UV Fluorescent	2	30	4
MAHG	Manchester Sharston	Suburban	384202	386121	NO ₂ , PM ₁₀ , PM _{2.5} , O ₃ , SO ₂	No	2016 AQMA	Chemiluminescent, Palas Fidas, UV absorption & UV Fluorescent	35	6	2.7
CW	Oldham Crompton Way	Roadside	393884	409183	NO ₂ , PM ₁₀	Yes	2016 AQMA	Chemiluminescent & BAM	10	1	1.5
RDL001	Rochdale Queensway	Roadside	389325	411411	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	2016 AQMA	Chemiluminescent & BAM	17	4	3
ECCL	Salford Eccles	Urban Background	377926	398727	NO ₂ , PM ₁₀ , PM _{2.5} , O ₃	No	2016 AQMA	Chemiluminescent, Palas Fidas & UV absorption	7	6	3.5

GLAZ	Salford Glazebury	Rural	368759	396027	NO ₂ , PM ₁₀ , PM _{2.5} , O ₃	No	2016 AQMA	Chemiluminescent, Palas Fidas & UV absorption	130	1372	3
M60	Salford M60	Roadside	374811	400857	NO ₂ , PM ₁₀ , PM _{2.5} , O ₃	Yes	2016 AQMA	Chemiluminescent, BAM & UV absorption	85	22	3
SAL001	Salford Regent Road (CAP)	Roadside	382580	397717	NO ₂	Yes	2016 AQMA	Chemiluminescent	N/A	3	1.5
STK7	Stockport Cheadle A34	Roadside	385047	388339	NO ₂ , PM ₁₀	Yes	2016 AQMA	Chemiluminescent & BAM	18	2	2
STK5	Stockport Hazel Grove	Roadside	391481	387637	NO ₂ , PM ₁₀	Yes	2016 AQMA	Chemiluminescent & BAM	33	4	2
TS001	Tameside A635 Manchester Road	Roadside	392538	398419	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	2016 AQMA	Chemiluminescent, BAM	10	1	2
TAM1	Tameside Mottram Moor	Roadside	399719	395804	NO ₂ , PM ₁₀	Yes	2016 AQMA	Chemiluminescent & BAM	4	5	4
TRF2	Trafford A56	Roadside	379411	394014	NO ₂ , PM ₁₀	Yes	2016 AQMA	Chemiluminescent & BAM	40	2	2.5
TRAF	Trafford Moss Park	Urban Background	378783	394728	NO ₂ , PM ₁₀	No	2016 AQMA	Chemiluminescent & BAM	60	98	2.5
TRF3	Trafford Wellacre Academy	Urban Background	373755	394477	NO ₂	No	2016 AQMA	Chemiluminescent	79	160	2.5
WIG5	Wigan Centre	Urban Background	357816	406024	NO ₂ , PM ₁₀ , PM _{2.5} , O ₃	No	2016 AQMA	Chemiluminescent, Palas Fidas & UV absorption	0	175	2.5
WIG07	Wigan Leigh 3	Roadside	365686	400243	NO ₂ , PM ₁₀ , PM _{2.5}	No	2016 AQMA	Chemiluminescent, BAM	23	3.6	2.6

Notes:

(1) N/A if not applicable

(2) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

Table A.2 – Details of Non-Automatic Monitoring Sites

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
Bolton Metropolitan Borough Council										
BO3NO	Quintins 3	Kerbside	370763	407929	NO ₂	2016 AQMA	2.0	0.5	No	2.4
BO4NO	Manley Terrace 4	Urban Background	371394	411718	NO ₂	2016 AQMA	0.0	2.5	No	2.4
BO8NO	Le Mans Crescent 8	Kerbside	371352	409094	NO ₂	No	5.0	0.5	No	2.4
BO11NO	Horwich Allotments 11	Urban Background	363712	412396	NO ₂	No	40.0	138.0	No	1.0
BO14NO	Farnworth Town Hall 14	Roadside	373839	406130	NO ₂	No	3.0	2.5	No	2.4
BO15NO	Astley Bridge t/lights 15	Kerbside	371435	411690	NO ₂	2016 AQMA	15.0	0.5	No	2.4
BO16NO	Drummond St 16	Urban Background	371304	411748	NO ₂	No	6.0	2.0	No	2.4
BO41NO	Bolton Road 41	Urban Background	366286	406561	NO ₂	No	5.0	1.5	No	2.4
BO43NO	Bee Hive Pub kerb 43	Kerbside	365501	409887	NO ₂	2016 AQMA	20.0	1.0	No	2.4
BO44NO, BO45NO	1007 Chorley new 45	Urban Background	365599	409845	NO ₂	2016 AQMA	0.0	19.0	No	2.0
BO48NO	Ainsworth Rd L/L 48	Urban Background	375397	407457	NO ₂	2016 AQMA	3.0	1.5	No	2.2
BO53NO	3 Turton Road yard 53	Urban Background	373236	411968	NO ₂	2016 AQMA	0.0	4.0	No	2.2

BO54NO	20 Laburnum Park 54	Urban Background	372908	412120	NO ₂	No	0.0	4.0	No	2.2
BO60NO	134 Buckley Lane 60	Roadside	373287	405061	NO ₂	2016 AQMA	3.0	1.5	No	2.4
BO61NO	Primrose Street 61	Kerbside	374450	405207	NO ₂	2016 AQMA	22.0	0.5	No	1.0
BO62NO	13 Higher Market Street 62	Urban Background	374194	405460	NO ₂	2016 AQMA	0.0	1.5	No	2.4
BO63NO	Fern Street 63	Urban Background	374282	406257	NO ₂	2016 AQMA	5.0	1.5	No	2.4
BO64NO	Bolton Gate Retail 64	Roadside	371965	409907	NO ₂	2016 AQMA	30.0	2.0	No	2.4
BO65NO	Pheonix Street 65	Urban Background	372059	409877	NO ₂	2016 AQMA	7.0	1.5	No	2.4
BO66NO	Blackburn Road 66	Roadside	371442	411599	NO ₂	2016 AQMA	20.0	3.0	No	2.4
BO67NO	The Welland 67	Urban Background	365163	405640	NO ₂	No	8.0	1.5	No	2.4
BO68NO	26 Winslow Road 68	Urban Background	367672	406910	NO ₂	2016 AQMA	13.0	1.5	No	2.4
BO69NO	Red Lion Salford Road 69 Lamp Post No2	Roadside	369030	405809	NO ₂	2016 AQMA	30.0	1.5	No	2.4
BO70NO	Cornwall Avenue Lamp Post No. 4 70	Roadside	368757	405701	NO ₂	2016 AQMA	8.0	1.5	No	2.4
BO71NO	J4 traffic Lights - northbound exit 71	Roadside	370362	405400	NO ₂	2016 AQMA	300.0	1.5	No	2.4
BO72NO	Watergate Drive 72	Roadside	370115	405372	NO ₂	2016 AQMA	75.0	9.5	No	2.4
BO73NO	Turton Street 73	Roadside	371805	409820	NO ₂	2016 AQMA	3.0	2.0	No	2.4

BO74NO	Kay Street 74	Roadside	371805	409832	NO ₂	2016 AQMA	100.0	2.0	No	2.4
BO75NO	Oxford St. (post near costa coffee) 75	Roadside	371623	409235	NO ₂	2016 AQMA	50.0	3.0	No	2.4
BO76NO, BO77NO, BO78NO	Westland Avenue 78	Roadside	373491	404836	NO ₂	No	1.0	3.0	No	2.0
BO79NO, BO80NO, BO81NO	Derby St (monitoring station)	Roadside	371296	408600	NO ₂	2016 AQMA	26.0	3.0	Yes	2.0
BOA101	Ivy Grove - Outside 26	Roadside	374561	405364	NO ₂	2016 AQMA	0.5	0.5	No	2.4
BOA102	Grosvenor Street - Outside 44	Roadside	374584	405525	NO ₂	2016 AQMA	0.5	0.5	No	2.4
BOA103	Bridge Street - Opposite 22	Roadside	374526	405906	NO ₂	NO	7.0	1.0	No	2.4
BOA104	All Saints - Outside 1 Devon Street	Roadside	373795	406600	NO ₂	NO	3.0	0.5	No	2.4
BOA105	Starcliffe Street - Outside 37	Roadside	373604	406882	NO ₂	2016 AQMA	1.0	0.5	No	2.4
BOA107	Bradford Street	Roadside	372372	408912	NO ₂	2016 AQMA	3.0	1.0	No	2.4
BOA106	Sharman Street - Opposite Number 4	Roadside	372643	408070	NO ₂	NO	3.0	1.0	No	2.4
BOA109	Corner of Bury Rd/Oakenbottom Rd	Roadside	373818	409401	NO ₂	2016 AQMA	7.0	1.5	No	2.4
BOA110	Topp Way Next to Entrance to Davenport Street	Roadside	371501	409694	NO ₂	2016 AQMA	10.0	0.5	No	2.4
BOA111	Corner Ruth Street/ST. Georges Road	Roadside	371102	409575	NO ₂	2016 AQMA	0.5	0.5	No	2.4

BOA112	Derby Street Adjacent to Sweet Green Tavern/Crook Street	Roadside	371715	408681	NO ₂	2016 AQMA	5.0	0.5	No	2.4
BOA113	Grosvenor Street – outside 16	Roadside	374510	405522	NO ₂	2016 AQMA	0.5	0.5	No	2.4
BOA114	Church Bank, near parish church	Roadside	372122	409347	NO ₂	2016 AQMA	100.0	0.5	No	2.4
BOA115	93 Bradshawgate	Roadside	371903	409026	NO ₂	2016 AQMA	3.0	0.5	No	2.4
BOA116	Great Moor St, outside St Patrick's presbytery	Roadside	371803	408976	NO ₂	2016 AQMA	5.0	0.5	No	2.4
BOA118	St Georges Street, The Renaissance Flats	Roadside	371832	409625	NO ₂	2016 AQMA	0.5	1.0	No	2.4
BOA119	Marsden Road, outside Marsden House	Roadside	371328	409251	NO ₂	2016 AQMA	0.5	0.5	No	2.4
BOA120	Bradford Street	Roadside	373946	405207	NO ₂	No	0.5	0.5	No	2.4
Bury Metropolitan Borough Council										
BU1NO	BU1 Baguley Crescent	Roadside	384372	404917	NO ₂	2016 AQMA	7.0	1.2	No	2.6
BU2NO	Ramsbottom Lane	Roadside	379101	417145	NO ₂	No	6.0	2.0	No	2.6
BU3ANO, BU3BNO, BU3CNO	BU3 Bury Roadside Whitefield (AURN)	Roadside	380636	406973	NO ₂	2016 AQMA	23.0	7.0	Yes	3.0

BU4NO	Hardmans Rd Whitefield	Roadside	380964	404831	NO ₂	2016 AQMA	8.2	22.0	No	2.3
BU5NO	BU5 Radcliffe New Rd. Whitefield	Roadside	380497	405420	NO ₂	No	4.1	3.5	No	2.5
BU6NO	BU6 5 Bolton Rd, Bury	Roadside	379658	410888	NO ₂	2016 AQMA	0.0	5.0	No	2.0
BU7NO	Ferngrove	Roadside	381984	411866	NO ₂	2016 AQMA	8.6	9.5	No	2.7
BU8NO	Walmersely Road	Roadside	380754	412619	NO ₂	No	6.0	0.3	No	2.6
BU9NO	Croston Road	Roadside	379630	411031	NO ₂	2016 AQMA	NA	3.5	No	2.5
BU10NO	Bury Bridge	Roadside	379854	410978	NO ₂	2016 AQMA	NA	4.4	No	2.5
BU11NO	Moorgate	Roadside	380980	411193	NO ₂	2016 AQMA	NA	1.5	No	2.5
BU12NO	Rochdale Road	Kerbside	381344	410744	NO ₂	2016 AQMA	1.9	0.5	No	2.2
BU13NO	Rochdale Road	Kerbside	381728	410677	NO ₂	2016 AQMA	11.0	0.5	No	2.5
BU14NO	Angouleme Way	Roadside	380398	410455	NO ₂	2016 AQMA	NA	3.0	No	2.2
BU15NO	Bury New Road/Bury Old Road	Kerbside	380852	405209	NO ₂	2016 AQMA	NA	0.5	No	2.3
BU16NO	Bury New Road	Roadside	380914	404898	NO ₂	2016 AQMA	5.0	2.2	No	2.6
BU17NO	Prestwich Centre	Roadside	381105	404279	NO ₂	2016 AQMA	13.0	3.0	No	2.3
BU18NO	Rochdale Old Road	Roadside	382071	411362	NO ₂	2016 AQMA	3.0	2.0	No	2.3

BU19NO	Balmoral Avenue	Roadside	381321	405115	NO ₂	2016 AQMA	7.0	12.0	No	2.5
BU20NO	Droughts Lane	Urban Background	382974	405930	NO ₂	2016 AQMA	6.0	25.0	No	2.5
Manchester City Council										
MA9ANO	Newton Street	Kerbside	384601	398303	NO ₂	2016 AQMA	43.0	0.5	No	3.0
MA24NO	Princess Street	Kerbside	383968	398070	NO ₂	2016 AQMA	150.0	0.5	No	3.0
MA26ANO	Chetham's School	Urban Background	383973	398874	NO ₂	2016 AQMA	5.0	59.0	No	3.0
MA29ANO	Oxford Street	Roadside	384119	397503	NO ₂	2016 AQMA	2.0	2.5	No	3.0
MA37NO	Princess Road	Roadside	382829	391493	NO ₂	2016 AQMA	10.0	4.0	No	3.0
MA59NO, MA60NO, MA61NO	Piccadilly Gardens	Urban Background	384310	398337	NO ₂	2016 AQMA	45.0	56.0	Yes	4.0
MA71NO	Great Ancoats Street	Roadside	385161	398290	NO ₂	2016 AQMA	10.0	3.0	No	3.0
MA72NO	Lockton Close	Urban Background	384761	397384	NO ₂	2016 AQMA	7.0	46.0	No	3.0
MA73NO	Hyde Road	Roadside	388604	396042	NO ₂	2016 AQMA	12.0	3.0	No	3.0
MA75NO	Stockport Road	Kerbside	387363	394617	NO ₂	2016 AQMA	3.0	0.5	No	3.0
MA77NO	Hewitt Street	Urban Background	383576	397489	NO ₂	2016 AQMA	2.0	8.0	No	3.0
MA81NO	Peaceville Road	Urban Background	386589	394083	NO ₂	No	10.0	18.0	No	3.0

MA82NO, MA83NO, MA84NO	Manchester Oxford Road	Roadside	384239	397276	NO ₂	2016 AQMA	5.0	3.0	Yes	2.0
MA88NO	Angel St	Kerbside	384469	398981	NO ₂	2016 AQMA	5.0	1.0	No	3.0
MA88ANO	Hyde Rd/Clowes St	Roadside	386536	396699	NO ₂	2016 AQMA	25.0	3.0	No	3.0
MA90BNO, MA91BNO, MA92BNO	Manchester Sharston	Suburban	384202	386121	NO ₂	No	35.0	44.0	Yes	3.0
MA93BNO	Palatine Road	Roadside	382419	390010	NO ₂	2016 AQMA	22.0	3.0	No	3.0
MA95BNO	Ashton Old Road	Roadside	386668	397566	NO ₂	2016 AQMA	9.0	2.5	No	3.0
MA96BNO	Ardwick Green	Roadside	385189	397167	NO ₂	2016 AQMA	2.0	3.0	No	3.0
MA99BNO	Oldham Road (rear of 6 Airton Close)	Roadside	385400	399245	NO ₂	2016 AQMA	8.0	3.0	No	3.0
MA100BNO	Middleton Road	Roadside	383605	402293	NO ₂	2016 AQMA	11.0	2.0	No	3.0
MA101BNO	Rochdale Rd, Harpurhey	Roadside	385999	402026	NO ₂	2016 AQMA	3.0	2.0	No	3.0
MA102BNO	1133 Rochdale Rd, Charlestown	Roadside	385792	402952	NO ₂	2016 AQMA	3.0	2.0	No	3.0
MA103BNO	Queens Rd, Harpurhey	Roadside	385431	400653	NO ₂	2016 AQMA	2.0	2.0	No	3.0
MA104BNO	Cheetwood Primary School, Waterloo Road	Roadside	383511	399906	NO ₂	2016 AQMA	0.5	2.0	No	3.0
MA112BNO	112 Epping Street	Roadside	383987	396734	NO ₂	2016 AQMA	2.0	2.0	No	3.0
MA113BNO	113 Brunswick Street	Roadside	385087	396891	NO ₂	2016 AQMA	2.3	2.0	No	3.0

Oldham Metropolitan Borough Council										
OLMRNO	Middleton Road (Chadd Precinct)	Roadside	390746	405397	NO ₂	No	3.5	2.0	No	2.0
OLSHSNO	St Herberts School, Broadway	Roadside	390394	405454	NO ₂	2016 AQMA	11.0	2.3	No	2.0
OL259BNO	Lamppost 94, outside 259 Broadway, Chadderton	Roadside	390089	404456	NO ₂	2016 AQMA	10.5	3.0	No	2.0
OL1RANO	Lamppost 1, Moston Rd, side of Radclyffe Arms Pub	Roadside	388698	404903	NO ₂	No	5.0	2.0	No	2.0
OL484BNO	Lamppost 1 outside 484 Broadway	Urban Background	389367	403280	NO ₂	2016 AQMA	4.5	9.9	No	2.0
OLOBNO	Outside 409 Broadway	Roadside	389789	403685	NO ₂	2016 AQMA	29.0	14.0	No	2.0
OLPSNO	Lamppost 1, Poplar St, Failsworth (end of Victoria St)	Urban Background	388747	400973	NO ₂	2016 AQMA	11.1	13.4	No	2.0
OLWARNO	Lamppost 35, Oldham Rd, Failsworth	Roadside	389237	401310	NO ₂	2016 AQMA	17.7	4.1	No	2.0
OLHRNO	Hollins Road jn. Cardigan Rd	Roadside	390756	402571	NO ₂	2016 AQMA	5.0	3.0	No	2.0
OLIRSNO	Lamppost 2, outside 13 Irving St, Failsworth	Urban Background	390675	402736	NO ₂	2016 AQMA	5.8	23.7	No	2.0
OL368MRNO	Outside 368 Manchester Rd, Chadderton	Roadside	390976	403252	NO ₂	2016 AQMA	2.0	4.4	No	2.0

OLESNO	Lamppost 4, outside 1 Edward St	Roadside	391367	404318	NO ₂	2016 AQMA	6.6	1.2	No	2.0
OLARNO	Ashton Road cnr Bellfield Rd	Roadside	392771	402951	NO ₂	No	3.0	3.0	No	2.0
OLWOODNO	First lamppost close to 1 Woodstock St	Urban Background	393056	404638	NO ₂	No	1.8	15.1	No	2.0
OLWSMSNO	Lamppost jn., Woodstock St/Mowbray St	Roadside	392947	404854	NO ₂	No	32.0	4.6	No	2.0
OL17SRNO	Bus Stop outside DP Kitchens 12-14 Shaw Rd, Derker	Kerbside	393643	405343	NO ₂	2016 AQMA	1.5	0.0	No	2.0
OLHS2NO	Lamppost 2 Honduras St, by Europcar	Roadside	393501	405186	NO ₂	No	15.5	12.0	No	2.0
OLRRNO	45 Ripponden Road	Roadside	394210	405752	NO ₂	No	1.0	1.5	No	2.0
OLHURNO	617 Huddersfield Road	Roadside	395561	405751	NO ₂	No	4.0	2.0	No	2.0
OLCVNO	65 Chew Valley Road	Roadside	399533	404454	NO ₂	No	2.5	2.0	No	2.0
OLHSNO	18 High St Uppermill	Roadside	399589	405511	NO ₂	No	2.0	2.0	No	2.0
OLCW1NO, OLCW2NO, OLCW3NO	Crompton Way 3	Roadside	393884	409183	NO ₂	No	2.0	2.0	Yes	1.5
OL21SRNO	Lamppost 6, outside 21 Shaw Rd, Royton	Roadside	392217	407255	NO ₂	2016 AQMA	0.5	2.0	No	2.0
OLJSNO	Lamppost 1, Jones St, Royton	Urban Background	393097	406897	NO ₂	No	5.1	7.2	No	2.0

OLRDNO	Rochdale Road jn. Sheepfoot Lane	Roadside	392111	406432	NO ₂	2016 AQMA	3.0	3.0	No	2.0
OL12ORNO	Outside Tokies, 12 Oldham Rd, Royton	Roadside	392045	407608	NO ₂	2016 AQMA	0.0	1.5	No	2.0
OLFANO	Lamppost outside 6 Fernlea Ave, Chadderton	Urban Background	391100	406218	NO ₂	No	6.8	1.9	No	2.0
OLSMWNO	Lamp post between St Mary's Way and Poppy Road	Urban Background	392748	405294	NO ₂	2016 AQMA	8.0	21.0	No	3.0
OLLSNO	Lamp post at side of 44 Lord Street close to St Mary's Way	Roadside	392646	405286	NO ₂	2016 AQMA	7.7	5.7	No	4.0
OLSWNO	Lamp post 142 Sedgemoor Way, Oldham	Roadside	392622	405289	NO ₂	2016 AQMA	0.0	17.0	No	5.0
Rochdale Metropolitan Borough Council										
RO2ANO	Trows Lane Castleton	Urban Background	388537	409942	NO ₂	2016 AQMA	0.0	20.0	No	2.0
RO3ANO	52 Cherrington Drive Castleton	Urban Background	388581	409797	NO ₂	2016 AQMA	100.0	15.0	No	2.0
RO4ANO	Middleton Library	Urban Background	387080	406278	NO ₂	2016 AQMA	0.0	5.0	No	2.0
RO5ANO	Mossway Middleton	Roadside	386870	404044	NO ₂	2016 AQMA	100.0	10.0	No	2.0
RO6ANO	Heywood Old Rd Birch	Kerbside	385413	408320	NO ₂	2016 AQMA	15.0	1.0	No	2.0
RO7ANO	Edinburgh Way Rochdale	Urban Background	388603	411925	NO ₂	2016 AQMA	0.0	6.0	No	2.0

RO8ANO	Manchester Old Rd Rochdale	Roadside	388932	412091	NO ₂	2016 AQMA	0.0	4.0	No	2.0
RO9ANO	Manchester Rd Rochdale	Kerbside	389057	412217	NO ₂	2016 AQMA	0.0	1.0	No	2.0
RO10ANO	Holmes Street Rochdale	Urban Background	388800	413603	NO ₂	2016 AQMA	0.0	4.0	No	2.0
RO12ANO	Halifax Road Wardle	Roadside	392072	415687	NO ₂	2016 AQMA	20.0	2.0	No	2.0
RO13ANO	725 Halifax Road Wardle	Urban Background	392042	415707	NO ₂	No	30.0	15.0	No	2.0
RO14ANO	Hey Bottom, Calderbrook	Rural	393665	417816	NO ₂	No	100.0	50.0	No	2.0
RO15ANO	M62 Depot Milnrow	Roadside	392976	411906	NO ₂	2016 AQMA	30.0	10.0	No	2.0
RO16ANO	Ashfield Road Milnrow	Urban Background	392542	411709	NO ₂	2016 AQMA	40.0	2.0	No	2.0
RO17ANO	Kingsway Rochdale	Urban Background	391214	412609	NO ₂	2016 AQMA	50.0	12.0	No	2.0
RO18ANO	Penn Street	Urban Background	389877	413590	NO ₂	No	150.0	1.0	No	2.0
RO20ANO	Manchester Road / Bader Drive	Roadside	385748	408931	NO ₂	2016 AQMA	50.0	1.0	No	2.0
RO21ANO	York Street, Heywood	Roadside	385820	410776	NO ₂	No	50.0	2.0	No	2.0
RO22ANO	19 Kingsway Rochdale	Roadside	390464	411976	NO ₂	2016 AQMA	20.0	2.0	No	2.0
RO23ANO	174 Oldham Road	Roadside	390377	412030	NO ₂	No	5.0	2.0	No	2.5
RO24ANO	Ogden Street, Castleton	Urban Background	388089	410822	NO ₂	No	13.0	3.0	No	2.5

RO25ANO	Oldham Road, Middleton	Roadside	387792	406013	NO ₂	No	1.0	1.5	No	3.0
RO26ANO	Whitworth Road	Roadside	389782	414241	NO ₂	2016 AQMA	20.0	1.5	No	3.0
RO27ANO	156 Halifax Road Rochdale	Roadside	390710	414563	NO ₂	2016 AQMA	1.0	1.5	No	2.5
RO28ANO	Smithy Bridge Road	Urban Background	392871	415127	NO ₂	No	1.0	2.0	No	3.0
RO29ANO, RO30ANO, RO31ANO	Queensway, Rochdale	Roadside	389325	411411	NO ₂	2016 AQMA	17.0	5.0	Yes	2.0
RO32ANO	Heywood Old Rd, Middleton	Roadside	385145	407701	NO ₂	No	2.0	2.5	No	2.0
Salford City Council										
SA1NO	Irlam Locks	Urban Background	372767	394104	NO ₂	NO	-30.0	45.0	No	1.7
SA2NO	Irlam (Princes Park)	Urban Background	372140	394210	NO ₂	NO	-57.0	67.0	No	3.0
SA4NO	Crompton	Urban Background	377453	401830	NO ₂	NO	-5.0	21.5	No	2.5
SA9NO	St Marks	Urban Background	374741	400937	NO ₂	NO	-10.0	125.0	No	2.0
SA13NO	Buckland Road	Urban Background	379613	399784	NO ₂	NO	12.0	2.5	No	3.0
SA16NO	Wharton School	Urban Background	371187	404453	NO ₂	NO	7.0	2.0	No	2.5
SA20NO, SA21NO, SA22NO	M60 automatic site co-location	Roadside	374811	400857	NO ₂	2016 AQMA	83.0	20.0	Yes	3.0
SA23NO, SA24NO, SA29NO	Eccles AURN co-location	Urban Background	377926	398727	NO ₂	NO	0.0	6.0	Yes	3.5

SA25NO	Wythop Gardens	Urban Background	381304	398014	NO ₂	2016 AQMA	-8.5	22.5	No	3.0
SA26NO	Halton Bank sub station	Roadside	380718	399597	NO ₂	2016 AQMA	8.0	6.0	No	2.0
SA27NO	Trinity Way	Roadside	383078	398741	NO ₂	2016 AQMA	2.0	1.5	No	3.0
SA31NO	Walkden Road	Roadside	374025	401905	NO ₂	2016 AQMA	8.0	3.5	No	3.0
SA34NO	Liverpool Road	Roadside	375367	397800	NO ₂	2016 AQMA	0.5	8.5	No	1.7
SA38NO	Clifton Primary School	Roadside	377796	403065	NO ₂	NO	7.0	1.7	No	2.5
SA51NO	Liverpool Road / Claybank	Roadside	375213	397661	NO ₂	2016 AQMA	1.5	2.5	No	2.0
SA55NO	Leigh Road / Ellenbrook Road	Roadside	372871	400734	NO ₂	2016 AQMA	7.0	3.0	No	2.5
SA56NO, SA57NO, SA58NO	Glazebury AURN co-location	Rural	368759	396027	NO ₂	NO	130.0	N/A	Yes	3.0
SA59NO	West Crown Avenue	Roadside	381822	397895	NO ₂	2016 AQMA	11.0	2.0	No	3.0
SA60NO	Regent Road	Roadside	382445	397724	NO ₂	2016 AQMA	2.5	4.5	No	2.0
SA61NO	Campbell Road	Roadside	377269	400943	NO ₂	2016 AQMA	5.0	3.5	No	2.5
SA63NO	Greenacre Lane	Roadside	374673	399912	NO ₂	2016 AQMA	-11.5	21.5	No	3.0
SA64NO	Lancaster Road	Roadside	378805	399848	NO ₂	2016 AQMA	10.0	5.0	No	2.0
SA65NO	Eccles Old Road	Roadside	378584	399220	NO ₂	2016 AQMA	10.0	3.0	No	3.0

SA66NO	Stannard Road	Roadside	375118	398502	NO ₂	2016 AQMA	5.0	12.5	No	3.0
SA68NO	Walkden High Street	Roadside	373570	403096	NO ₂	2016 AQMA	3.5	2.5	No	3.0
SA69NO	Agecroft Road/ Pendlecroft Ave	Roadside	379397	401370	NO ₂	2016 AQMA	8.5	1.5	No	3.0
SA70NO	Belvedere Road	Roadside	381677	398832	NO ₂	2016 AQMA	4.0	12.8	No	3.0
SA72NO	Station Road, Swinton	Roadside	377536	401804	NO ₂	2016 AQMA	2.0	0.5	No	3.0
SA73NO	Worsley Brow	Roadside	374576	400611	NO ₂	2016 AQMA	0.0	N/A	No	3.0
SA74NO	Canal Bank	Roadside	376315	399249	NO ₂	2016 AQMA	-3.5	24.0	No	3.0
SA75NO	Weaste Road	Roadside	379608	398539	NO ₂	2016 AQMA	7.5	0.5	No	3.0
SA76NO	Langworthy Road	Roadside	380540	398422	NO ₂	2016 AQMA	5.0	2.9	No	3.0
SA77NO	Albion Way (Trenam Place)	Roadside	381686	398504	NO ₂	2016 AQMA	3.0	13.5	No	3.0
SA78NO	Broughton Road	Roadside	381220	399530	NO ₂	2016 AQMA	2.5	1.5	No	3.0
SA79NO	Chapel Street	Roadside	382602	398519	NO ₂	2016 AQMA	2.0	10.0	No	3.0
SA80NO	Hawthorne Drive	Roadside	375428	401417	NO ₂	2016 AQMA	-9.0	30.5	No	3.0
SA82NO	Rooke Street	Roadside	375394	397816	NO ₂	2016 AQMA	10.0	2.2	No	3.0
SA83NO	Bury New Road	Roadside	382945	400732	NO ₂	2016 AQMA	7.7	3.0	No	2.5

SA84NO	Langley Road	Roadside	380776	400834	NO ₂	NO	2.0	2.0	No	2.5
SA85NO	Bray Avenue	Roadside	375991	399237	NO ₂	2016 AQMA	-3.5	9.0	No	2.5
SA86NO	Bury Old Road	Kerbside	383819	401771	NO ₂	NO	5.0	0.5	No	2.5
SA87NO	Merlin Road	Roadside	372225	395616	NO ₂	NO	9.0	2.4	No	2.5
SA89NO	Velveteen Crescent	Roadside	373892	404569	NO ₂	2016 AQMA	7.0	30.0	No	2.5
SA90NO	Trafford Road	Roadside	381349	397162	NO ₂	2016 AQMA	2.5	4.5	No	2.0
SA91NO, SA92NO, SA93NO	Regent Road automatic site co-location	Roadside	382580	397717	NO ₂	2016 AQMA	0.0	3.0	Yes	1.5
Stockport Metropolitan Borough Council										
ST3NO	Denby Lane	Urban Background	388547	391845	NO ₂	2016 AQMA	8.0	2.0	No	2.5
ST4NO	Compstall Library	Rural	396469	390800	NO ₂	No	15.0	20.0	No	2.5
ST5NO	Lyme Farm	Rural	396869	382699	NO ₂	No	8.0	100.0	No	1.5
ST6NO	Cheadle Library	Urban Background	385960	388552	NO ₂	No	24.0	20.0	No	1.5
ST7NO	Civic Centre Hazel Grove	Kerbside	392063	386972	NO ₂	2016 AQMA	3.0	1.0	No	2.0
ST8NO	Marshalls Yard Hazel Grove	Urban Background	392016	387042	NO ₂	2016 AQMA	14.0	15.0	No	1.5
ST9NO	Alderley Close Hazel Grove	Urban Background	392742	385680	NO ₂	No	0.0	25.0	No	1.5

ST10NO	Deneside Cres. Hazel Grove	Urban Background	392781	387271	NO ₂	No	0.0	6.0	No	1.5
ST11NO	Norwood Road	Roadside	391083	387938	NO ₂	2016 AQMA	3.0	3.0	No	2.0
ST13NO	Prospect Vale	Urban Background	384675	386295	NO ₂	No	4.0	2.0	No	2.0
ST2NO, ST12NO, ST14NO	A34 Kingsway	Roadside	385047	388339	NO ₂	2016 AQMA	8.0	1.0	Yes	2.0
ST15NO	Bramhall Lane	Roadside	389886	388961	NO ₂	2016 AQMA	4.0	2.0	No	2.0
ST16NO	Stockport Rd. Bredbury	Roadside	391568	391225	NO ₂	2016 AQMA	20.0	3.0	No	2.5
ST17NO	Yew Street	Urban Background	388442	390077	NO ₂	2016 AQMA	82.0	2.0	No	2.0
ST18NO	Debenhams	Urban Background	389272	390440	NO ₂	2016 AQMA	20.0	3.0	No	2.0
ST19NO	Gorton Road	Roadside	389479	393463	NO ₂	2016 AQMA	0.0	2.2	No	2.5
ST20NO	Kennilworth Road	Urban Background	386921	389528	NO ₂	2016 AQMA	3.0	15.0	No	2.0
ST21NO	Carmichael Street	Urban Background	388598	389415	NO ₂	No	0.0	1.0	No	2.5
ST22NO, ST23NO, ST24NO	A6 Hazel Grove	Roadside	391481	387637	NO ₂	2016 AQMA	5.0	5.0	Yes	2.0
ST25NO	Central Marple	Roadside	395770	388655	NO ₂	No	5.0	3.0	No	2.5
ST26NO	Midland Road	Urban Background	389396	387357	NO ₂	No	0.0	10.0	No	1.5
ST27NO	Pinewood Close	Urban Background	387091	391384	NO ₂	No	0.0	6.0	No	1.5

ST28NO	Finney Lane	Roadside	385700	386219	NO ₂	2016 AQMA	2.0	3.0	No	2.5
ST29NO	Russell Street	Urban Background	390087	388545	NO ₂	No	0.0	2.0	No	1.5
ST31NO	Stockport Rd, West Bredbury	Roadside	392442	391752	NO ₂	2016 AQMA	10.0	2.0	No	2.5
ST32NO	Lancashire Hill	Roadside	389480	390957	NO ₂	2016 AQMA	30.0	2.0	No	2.5
ST33NO	Hall Street	Roadside	390416	390087	NO ₂	2016 AQMA	10.0	2.0	No	2.5
ST34NO	Didsbury Road	Roadside	388304	390351	NO ₂	2016 AQMA	6.0	2.0	No	2.5
ST35NO	A6, High Lane	Roadside	395020	385360	NO ₂	2016 AQMA	2.0	2.0	No	2.5
ST36NO	A6 Post Office Site	Roadside	389386	390142	NO ₂	2016 AQMA	5.0	1.0	No	2.4
Tameside Metropolitan Borough Council										
TA1NO	King Street Dukinfield	Roadside	394051	397180	NO ₂	No	1.0	2.0	No	3.0
TA2NO	Hyde Town Hall Hyde	Roadside	394788	394933	NO ₂	No	2.0	2.0	No	3.0
TA3NO	Thompson Road Denton	Urban Background	390961	395417	NO ₂	Yes	3.0	2.0	No	3.0
TASPNO	Penny Meadow Ashton	Roadside	394194	399267	NO ₂	2016 AQMA	3.0	4.0	No	3.0
TA5NO	Green Lane Hollingworth	Urban Background	400488	396539	NO ₂	No	6.0	2.0	No	3.0
TA11NO	Market Street Hollingworth	Roadside	400390	396025	NO ₂	2016 AQMA	1.0	2.0	No	3.0

TA13NO	Manchester Road Ashton	Roadside	392586	398431	NO ₂	2016 AQMA	10.0	3.0	No	3.0
TA14NO	Park Parade Ashton	Roadside	393696	398794	NO ₂	2016 AQMA	30.0	10.0	No	3.0
TA16NO	Manchester Road Audenshaw	Roadside	391413	397974	NO ₂	2016 AQMA	8.0	2.0	No	3.0
TA17NO	Manchester Road Droylsden	Roadside	389106	398242	NO ₂	2016 AQMA	4.0	4.0	No	3.0
TA18NO	Manchester Road Denton	Roadside	391970	395521	NO ₂	2016 AQMA	35.0	2.0	No	3.0
TA19NO	Manchester Road Crown Point	Roadside	392477	395505	NO ₂	2016 AQMA	1.0	1.0	No	3.0
TA20NO	B&Q Hyde	Roadside	394610	395102	NO ₂	2016 AQMA	3.0	1.0	No	3.0
TA21NO	Woolley Lane Hollingworth	Roadside	400423	395965	NO ₂	2016 AQMA	1.0	1.0	No	3.0
TA23NO	Cavendish Mill Ashton	Urban Background	393630	398598	NO ₂	No	1.0	9.0	No	3.0
TA24NO	Manchester Road Denton (Golf Course)	Roadside	390475	395621	NO ₂	2016 AQMA	5.0	2.0	No	3.0
TA25NO	Oldham Road Ashton	Roadside	396950	402329	NO ₂	2016 AQMA	5.0	2.0	No	3.0
TA27NO	Acres Lane Stalybridge	Roadside	396177	398218	NO ₂	2016 AQMA	17.0	2.0	No	3.0
TA28NO	George Lawton Hall, Mossley	Roadside	393050	401038	NO ₂	No	5.0	2.0	No	3.0
TA29NO	Keane Street Ashton	Suburban	393370	399494	NO ₂	No	3.0	75.0	No	3.0
TA30NO	Oldham Road Ashton	Roadside	393419	399691	NO ₂	2016 AQMA	2.0	2.0	No	3.0

TA31NO	Waterton Lane Mossley	Suburban	396899	402449	NO ₂	No	5.0	2.0	No	3.0
TA32NO	Arundel Street Mossley	Suburban	396982	402437	NO ₂	No	2.0	2.0	No	3.0
TA33NO	Lees Road Mossley	Roadside	397011	402591	NO ₂	No	2.0	2.0	No	3.0
TA34NO	Stockport Road Mossley	Roadside	397060	402581	NO ₂	No	16.0	2.0	No	3.0
TA35NO	Stamford Road Mossley	Roadside	397080	402540	NO ₂	No	8.0	2.0	No	3.0
TA36NO	Argyle Street Mossley	Suburban	397060	402387	NO ₂	No	2.0	1.0	No	3.0
TA37NO	Stamford Street Mossley	Roadside	396728	402073	NO ₂	No	7.0	2.0	No	3.0
TA38NO	Albermarle Terrace Ashton	Urban Background	394006	399392	NO ₂	No	11.0	22.0	No	3.0
TA39NO	Cowhill Lane Ashton	Urban Background	394114	399366	NO ₂	No	11.0	1.0	No	3.0
TA40NO	Cowhill Lane Railway Bridge Ashton	Urban Background	394066	399314	NO ₂	No	45.0	1.0	No	3.0
TA41NO	Newton Street Ashton	Urban Background	394118	399259	NO ₂	2016 AQMA	1.0	2.0	No	3.0
TA42NO	Stamford Street East Ashton	Urban Background	394494	399010	NO ₂	No	6.0	2.0	No	3.0
TA43NO	Scotland Street Ashton	Roadside	394204	398933	NO ₂	2016 AQMA	30.0	13.0	No	3.0
TA44NO	Hattersley Road West Hattersley	Urban Background	397418	394398	NO ₂	No	22.0	12.0	No	3.0
TA45NO, TA46NO, TA47NO	Mottram Moor Hollingworth	Roadside	399719	395805	NO ₂	2016 AQMA	24.0	5.0	Yes	4.0

TA48NO	Howard Lane Denton	Roadside	392699	395733	NO ₂	2016 AQMA	5.0	75.0	No	3.0
TA49NO	Park Parade AuL adjacent to Asda car park lamp post 56	Roadside	393731	398770	NO ₂	2016 AQMA	46.0	3.0	No	3.0
TA50NO	Park Parade/ Bentinck St AuL lamp post no.	Roadside	393498	398704	NO ₂	2016 AQMA	140.0	4.0	No	3.0
TA51NO	Park Parade AuL adjacent to Bentinck St car park lamp post no 113	Kerbside	393314	398624	NO ₂	2016 AQMA	82.0	1.0	No	3.0
TA52NO	Park Parade AuL adjacent to Bentinck St car park	Roadside	393509	398737	NO ₂	2016 AQMA	103.0	5.0	No	3.0
TA53NO	Stockport Rd AuL lamp post no.2	Roadside	393133	398536	NO ₂	2016 AQMA	31.0	3.0	No	3.0
TA54NO	Quality Vans William St AuL lamp post no.16	Roadside	392958	398474	NO ₂	2016 AQMA	24.0	3.0	No	3.0
TA55NO	39/41 Manchester Rd AuL lamp post no.17	Roadside	392741	398469	NO ₂	2016 AQMA	6.0	3.0	No	3.0
TA56NO	Manchester Rd AuL Slip Rd S/W lamp post no.28	Roadside	392490	398368	NO ₂	2016 AQMA	11.0	5.0	No	3.0
TA57NO	Manchester Rd AuL bus stop opposite BP station lamp post	Roadside	392838	398533	NO ₂	2016 AQMA	28.0	3.0	No	3.0
TA58NO	Manchester Rd AuL St Peter's	Roadside	393080	398620	NO ₂	2016 AQMA	40.0	4.0	No	3.0

	Church lamp post no.3									
TA59NO	Astley Rd Stalybridge lamp post no.15	Roadside	395652	399140	NO ₂	No	23.0	2.0	No	3.0
TA60NO	33 Darnton Rd Stalybridge lamp post no.30	Roadside	395747	399112	NO ₂	No	9.0	1.0	No	3.0
TA61NO	42 Darnton Rd Stalybridge lamp post no.27	Roadside	395682	399171	NO ₂	No	6.0	1.0	No	3.0
TA62NO	Darnton Rd Stalybridge adjacent to boating lake lamp post no.23	Roadside	395589	399227	NO ₂	No	25.0	4.0	No	3.0
TA63NO	Lees Road Ashton, lamp post 15	Kerbside	394917	400922	NO ₂	No	13.0	0.0	No	3.0
TA64NO	Stamford Street Stalybridge	kerbside	395787	398769	NO ₂	2016 AQMA	1.0	0.0	No	3.0
TA65NO	Guide Lane Audenshaw	Kerbside	392532	396768	NO ₂	2016 AQMA	30.0	0.0	No	3.0
Trafford Metropolitan Borough Council										
TR5NO	5 Sale Leisure Centre	Urban Background	379052	392043	NO ₂	No	10.0	5.0	No	4.0
TR9NO	9 Trafford, Town Hall 12	Urban Background	380933	395889	NO ₂	2016 AQMA	20.0	100.0	No	3.0
TR19NO, TR19ANO, TR19BNO	19w Moss Park School (AQMA)	Urban Background	378783	394728	NO ₂	No	3.0	100.0	Yes	2.0
TR20NO, TR20ANO, TR20BNO	20w A56 Chester Road AQMA	Roadside	379411	394014	NO ₂	2016 AQMA	42.0	5.0	Yes	3.0

TR22NO	22w A56 corner of De Quincey Road	Kerbside	377089	390130	NO ₂	2016 AQMA	50.0	1.0	No	4.0
TR15NO	Bradley Lane, Stretford	Roadside	379089	393282	NO ₂	2016 AQMA	350.0	5.0	No	4.0
TR16NO, TR16ANO	Kingsway Park School, Urmston	Roadside	377418	395689	NO ₂	2016 AQMA	30.0	2.0	No	3.0
TR23NO	Stroma Gardens	Roadside	376432	396355	NO ₂	2016 AQMA	8.0	40.0	No	3.0
TR24NO	Tithebarn Road	Urban Background	379263	385812	NO ₂	No	16.0	3.0	No	2.0
TR25NO, TR25ANO, TR25BNO	Wellacre Academy	Kerbside	373755	394477	NO ₂	No	10.0	160.0	Yes	2.0
TR27NO	Warburton Lane Partington	Kerbside	371419	390760	NO ₂	No	20.0	1.0	No	2.0
TR28NO	Stamford New Road, Altrincham	Roadside	376804	387740	NO ₂	No	0.0	2.0	No	2.0
TR29NO	29	Kerbside	373906	392820	NO ₂	No	10.0	3.0	No	2.0
TR31NO	Carrington Spur	Roadside	376205	392690	NO ₂	No	120.0	0.5	No	2.0
Wigan Metropolitan Borough Council										
WI24NO	Wigan Town Hall	Roadside	358341	405539	NO ₂	2016 AQMA	20.0	4.0	No	2.0
WI33NO	Rose Court, Ince	Roadside	359723	405537	NO ₂	2016 AQMA	30.0	1.0	No	2.0
WI52NO	Church Lane, Lowton (A580)	Roadside	362137	396948	NO ₂	2016 AQMA	35.0	3.0	No	2.0
WI81NO	Preston Road Standish	Roadside	355979	410362	NO ₂	2016 AQMA	0.0	4.0	No	2.0

WI114NO	Atherleigh Way, Leigh	Roadside	365115	400259	NO ₂	No	0.0	3.0	No	2.0
WI148NO	120 Wigan Road	Kerbside	361247	404576	NO ₂	No	5.0	1.0	No	2.0
WI156NO	244 Leigh Road	Kerbside	366320	402136	NO ₂	No	8.0	1.0	No	2.0
WI161NO	80 Manchester Road	Roadside	369635	402019	NO ₂	No	0.0	2.0	No	2.0
WI167NO	60 Newton Road	Roadside	363544	397933	NO ₂	No	15.0	2.0	No	2.0
WI168NO	239a Newton Road	Kerbside	362463	397005	NO ₂	2016 AQMA	15.0	2.0	No	2.0
WI169NO	East Lancashire Road	Roadside	362557	396906	NO ₂	No	28.0	2.0	No	2.0
WI170NO	269 Newton Road	Roadside	362236	396675	NO ₂	No	11.0	1.0	No	2.0
WI172NO	537 Wigan Road	Kerbside	356881	401314	NO ₂	No	3.0	1.0	No	2.0
WI177NO	18 Cross Street	Kerbside	356230	410105	NO ₂	No	1.0	3.0	No	2.0
WI178NO	22 School Lane	Kerbside	356021	410128	NO ₂	No	6.0	0.5	No	2.0
WI180NO	4 Winwick Lane	Kerbside	362105	396491	NO ₂	No	0.0	2.0	No	2.0
WI181NO	Walthew House Lane	Kerbside	354819	406235	NO ₂	No	5.0	1.0	No	2.0
WI186NO	King Street West C	Kerbside	358070	405587	NO ₂	2016 AQMA	88.0	2.0	No	2.0
WI188NO	Winwick Lane B	Roadside	362111	396526	NO ₂	No	18.0	2.0	No	2.0

WI205NO	Lime Grove, Lane Head	Kerbside	362151	396604	NO ₂	No	6.5	1.0	No	2.0
WI208NO, WI209NO, WI210NO	Wigan Leigh 3	Roadside	365686	400243	NO ₂	No	23.0	2.0	Yes	2.0
WI213NO	Newton Road B	Roadside	362019	396512	NO ₂	No	19.0	1.0	No	2.0
WI216NO	Darlington Street B	Kerbside	358464	405342	NO ₂	2016 AQMA	2.0	1.0	No	2.0
WI217NO	Miry Lane	Kerbside	357780	405306	NO ₂	No	20.0	0.5	No	2.0
WI219NO	Wilcock Street, Wigan	Roadside	357484	405407	NO ₂	No	59.0	2.0	No	2.0
WI220NO	Pottery Road, Wigan	Roadside	357420	405407	NO ₂	No	146.0	2.0	No	2.0
WI221NO	Tanners Lane, Golborne (A)	Roadside	360499	397867	NO ₂	No	3.0	2.0	No	2.0
WI222NO	Tanners Lane, Golborne (B)	Roadside	360491	397842	NO ₂	No	12.0	2.0	No	2.0
WI223NO	High Street, Golborne (A)	Roadside	360430	397779	NO ₂	No	15.0	2.0	No	2.0
WI224NO	High Street, Golborne (B)	Roadside	360418	397775	NO ₂	No	10.0	2.0	No	2.0
WI225NO	Charles Street, Golborne (B)	Roadside	360459	397995	NO ₂	No	11.0	2.0	No	2.0
WI226NO	Charles St, Golborne (C)	Roadside	360462	398006	NO ₂	No	2.0	2.0	No	2.0
WI227NO	High Street, Golborne (C)	Roadside	360576	398144	NO ₂	No	21.0	2.0	No	2.0
WI228NO	High Street, Golborne (D)	Roadside	360578	398126	NO ₂	No	4.0	2.0	No	2.0

WI230NO	Heath Street, Golborne (B)	Roadside	360380	397912	NO ₂	No	0.0	2.0	No	2.0
WI231NO	St Oswalds Road / A58, Ashton	Roadside	357473	398990	NO ₂	No	25.0	2.0	No	2.0
WI232NO	Queens Road / A49, Ashton	Roadside	357635	399502	NO ₂	No	15.0	3.0	No	2.0
WI233NO	Gidlow Lane / Gidlow Ave, Wigan	Kerbside	357445	406461	NO ₂	No	9.0	1.0	No	2.0
WI234NO	Atherton Road / Oak Avenue, Hindley Green	Roadside	363136	403467	NO ₂	No	10.0	3.0	No	2.0
WI235NO	Chestnut Avenue, Leigh	Roadside	365419	399116	NO ₂	No	21.0	0.5	No	2.0
WI236NO	Eyet Street, Leigh	Kerbside	365386	400353	NO ₂	No	5.0	0.5	No	2.0
WI237NO	Fletcher St, Atherton	Kerbside	367352	403200	NO ₂	No	12.0	0.5	No	2.0
WI238NO	Oak Street, Atherton	Roadside	369056	402146	NO ₂	No	10.0	2.0	No	2.0
WI239NO	Worsley Mesnes Ave, Wigan	Roadside	357092	404213	NO ₂	No	20.0	3.0	No	2.0
WI240NO	Wigan Road, New Springs	Kerbside	360220	407146	NO ₂	No	14.0	2.0	No	2.0
WI241NO	Kenyon Road, Wigan	Kerbside	358025	406658	NO ₂	No	8.0	0.5	No	2.0
WI244NO	244	Kerbside	357610	406859	NO ₂	No	14.0	1.0	No	2.0
WI245NO	245	Kerbside	358133	405492	NO ₂	2016 AQMA	8.0	0.5	No	2.0

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

Table A.3 – Annual Mean NO₂ Monitoring Results: Automatic Monitoring (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Bolton A579 Derby Street	371296	408600	Roadside	99.8	99.8	-	23	23	21.4	19.9
Bury Bridge (CAP)	379840	410944	Roadside	99.2	99.2	-	-	22.6	22.3	20.7
Bury Prestwich	381650	403222	Roadside	99.3	99.3	-	33.3	30	28.1	26.7
Bury Radcliffe	378190	407480	Roadside	99.2	99.2	20	21.7	20	18.9	17.8
Bury Whitefield	380636	406973	Roadside	93.3	93.3	19	20	21	19.6	18.6
Manchester Bridge Street (CAP) ⁽³⁾	383556	398292	Roadside	91.3	91.3	-	-	-	53.5	51.9
Manchester Oxford Rd	384239	397276	Kerbside	82.4	81.3	36	44(40.4)	43(38.4)	40.9(35.6)	44.2(37.3)
Manchester Piccadilly	384310	398337	Urban Centre	90.3	90.3	27	30	29	26.8	27.0
Manchester Sharston	384202	386121	Suburban	100.0	98.3	14	16	15	14.7	14.2
Oldham Crompton Way	393884	409183	Roadside	100.0	95.2	23	25	24	21	20.2
Rochdale Queensway	389325	411411	Roadside	98.6	98.6	-	28.5	27	25.7	23.2
Salford Eccles	377926	398727	Urban Background	100.0	94.5	20	23	22	19.6	18.0
Salford Glazebury	368759	396027	Rural	100.0	98.2	11	12	11	12.1	11.2
Salford M60	374811	400857	Roadside	99.2	99.2	34	34	34	33.4	31.5
Salford Regent Road (CAP)	382580	397717	Roadside	99.2	99.2	-	-	-	32	32.0

Stockport Cheadle A34	385047	388339	Roadside	99.1	99.1	26	28	29	25.6	24.9
Stockport Hazel Grove	391481	387637	Roadside	99.2	99.2	16	19	18	16.7	16.0
Tameside A635 Manchester Road	392538	398419	Roadside	99.5	99.5	29.2	34	32	30.1	29.1
Tameside Mottram Moor	399719	395804	Roadside	99.7	99.7	30	36	34	32.9	29.7
Trafford A56	379411	394014	Roadside	96.4	96.4	21	23	24	20.7	20.2
Trafford Moss Park	378783	394728	Urban Background	93.7	70.0	14	15	15	14.4	12.4
Trafford Wellacre Academy	373755	394477	Urban Background	99.4	96.3	11	13	11	10.6	10.6
Wigan Centre	357816	406024	Urban Background	100.0	90.0	15	17	17	14.8	12.7
Wigan Leigh 3	365686	400243	Roadside	68.2	68.2	23.8	25	22	21.4	19.1

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.**

☒ **Reported concentrations are those at the location of the monitoring site (annualised, as required), i.e. prior to any fall-off with distance correction.**

☒ **Where exceedances of the NO₂ annual mean objective occur at locations not representative of relevant exposure, the fall-off with distance concentration has been calculated and reported concentration provided in brackets for 2024.**

Notes:

The annual mean concentrations are presented as µg/m³.

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) This is a Clean Air Plan location and there is no nearby relevant exposure.

Table A.4 – Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg/m³)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Bolton Metropolitan Borough Council										
BO3NO	370763	407929	Kerbside	32.1	32.1	31.8	37.1	36.6	37.4	31.1
BO4NO	371394	411718	Urban Background	39.6	39.6	19.3	20.0	21.4	18.7	15.9
BO8NO	371352	409094	Kerbside	39.6	39.6	18.5	19.5	23.8	18.4	16.8
BO11NO	363712	412396	Urban Background	39.6	39.6	9.0	10.9	10.7	8.9	9.1
BO14NO	373839	406130	Roadside	39.6	39.6	17.4	18.2	19.1	18.4	15.8
BO15NO	371435	411690	Kerbside	39.6	39.6	29.0	28.1	30.7	27.4	20.2
BO16NO	371304	411748	Urban Background	39.6	39.6	15.5	16.6	17.0	15.4	13.3
BO41NO	366286	406561	Urban Background	39.6	39.6	28.3	29.4	27.6	26.8	23.2
BO43NO	365501	409887	Kerbside	39.6	39.6	25.8	26.2	27.4	27.0	22.3
BO44NO, BO45NO	365599	409845	Urban Background	39.6	39.6	17.7	18.0	18.3	16.6	15.3
BO48NO	375397	407457	Urban Background	39.6	39.6	22.7	23.1	21.4	20.9	17.7
BO53NO	373236	411968	Urban Background	39.6	39.6	16.7	14.2	25.4	30.7	25.1
BO54NO	372908	412120	Urban Background	39.6	39.6	11.2	12.4	11.0	11.7	10.2

BO60NO	373287	405061	Roadside	32.1	32.1	23.8	25.6	26.6	23.1	19.0
BO61NO	374450	405207	Kerbside	39.6	39.6	27.8	31.7	30.4	29.2	26.0
BO62NO	374194	405460	Urban Background	39.6	39.6	28.4	29.9	30.7	29.1	24.9
BO63NO	374282	406257	Urban Background	32.1	32.1	17.9	18.5	17.3	17.7	15.8
BO64NO	371965	409907	Roadside	39.6	39.6	21.8	21.1	23.9	22.3	18.8
BO65NO	372059	409877	Urban Background	39.6	39.6	21.5	21.8	23.0	19.4	18.9
BO66NO	371442	411599	Roadside	39.6	39.6	29.0	32.5	31.2	28.2	20.4
BO67NO	365163	405640	Urban Background	30.2	30.2	18.3	17.1	16.6	15.1	12.9
BO68NO	367672	406910	Urban Background	39.6	39.6	22.6	23.7	24.1	22.3	22.6
BO69NO	369030	405809	Roadside	25.0	25.0	36.0	38.1	39.2	35.9	30.6
BO70NO	368757	405701	Roadside	39.6	39.6	16.1	18.2	18.9	17.0	13.4
BO71NO	370362	405400	Roadside	39.6	39.6	38.0	41.5	39.7	40.4	31.6
BO72NO	370115	405372	Roadside	39.6	39.6	25.4	25.8	37.0	22.0	20.1
BO73NO	371805	409820	Roadside	32.1	32.1	33.0	37.4	38.3	35.7	27.2
BO74NO	371805	409832	Roadside	39.6	39.6	31.8	33.8	34.5	33.2	28.6
BO75NO	371623	409235	Roadside	17.0	17.0	28.2	19.1	20.5	16.8	-

BO76NO, BO77NO, BO78NO	373491	404836	Roadside	32.1	32.1	22.1	24.7	26.0	24.4	21.5
BO79NO, BO80NO, BO81NO	371296	408600	Roadside	39.6	39.6	-	18.7	25.2	23.0	20.5
BOA101	374561	405364	Roadside	39.6	39.6	23.6	25.3	25.8	22.5	22.7
BOA102	374584	405525	Roadside	32.1	32.1	25.2	24.9	26.9	24.7	20.9
BOA103	374526	405906	Roadside	39.6	39.6	20.1	22.5	21.3	21.2	18.0
BOA104	373795	406600	Roadside	32.1	32.1	29.7	34.1	35.6	33.0	18.3
BOA105	373604	406882	Roadside	39.6	39.6	25.8	26.1	27.0	25.1	21.4
BOA107	372372	408912	Roadside	39.6	39.6	19.1	20.3	21.0	19.4	18.0
BOA106	372643	408070	Roadside	39.6	39.6	22.8	31.3	26.5	27.0	23.8
BOA109	373818	409401	Roadside	39.6	39.6	17.9	18.6	19.0	18.3	15.9
BOA110	371501	409694	Roadside	39.6	39.6	30.1	33.4	32.3	29.9	24.5
BOA111	371102	409575	Roadside	39.6	39.6	26.7	28.8	28.7	25.2	24.5
BOA112	371715	408681	Roadside	39.6	39.6	29.2	29.8	28.8	25.3	25.8
BOA113	374510	405522	Roadside	32.1	32.1	23.3	25.9	26.9	25.2	21.0
BOA114	372122	409347	Roadside	39.6	39.6	25.6	26.1	26.2	24.7	20.5
BOA115	371903	409026	Roadside	39.6	39.6	35.7	32.3	32.3	35.1	27.6

BOA116	371803	408976	Roadside	30.2	30.2	29.4	31.0	28.7	30.9	24.3
BOA118	371832	409625	Roadside	39.6	39.6	23.0	24.5	24.8	23.7	20.2
BOA119	371328	409251	Roadside	32.1	32.1	25.3	27.1	31.4	31.7	29.0
BOA120	373946	405207	Roadside	57.0	32.1	-	-	-	-	18.2
Bury Metropolitan Borough Council										
BU1NO	384372	404917	Roadside	83.0	83.0	24.4	25.3	26.6	24.6	21.9
BU2NO	379101	417145	Roadside	81.1	81.1	25.1	27.4	28.7	26.8	27.3
BU3ANO, BU3BNO, BU3CNO	380636	406973	Roadside	90.6	90.6	25.2	19.1	20.9	18.8	16.7
BU4NO	380964	404831	Roadside	66.0	66.0	27.4	28.4	31.8	29.1	27.4
BU5NO	380497	405420	Roadside	90.6	90.6	21.1	20.9	21.0	19.6	17.6
BU6NO	379658	410888	Roadside	90.6	90.6	27.5	30.4	30.7	27.3	23.6
BU7NO	381984	411866	Roadside	83.0	83.0	23.4	24.8	25.9	24.1	21.5
BU8NO	380754	412619	Roadside	90.6	90.6	23.7	25.6	25.9	23.2	23.2
BU9NO	379630	411031	Roadside	90.6	90.6	27.1	26.9	30.2	25.0	22.8
BU10NO	379854	410978	Roadside	58.5	58.5	27.3	27.9	30.7	26.9	27.6
BU11NO	380980	411193	Roadside	90.6	90.6	32.3	33.5	34.7	31.4	27.7

BU12NO	381344	410744	Kerbside	90.6	90.6	35.0	40.9	38.7	38.7	36.4
BU13NO	381728	410677	Kerbside	75.0	75.0	34.0	39.8	36.9	35.0	34.0
BU14NO	380398	410455	Roadside	83.0	83.0	26.9	26.8	30.7	29.6	25.8
BU15NO	380852	405209	Kerbside	90.6	90.6	34.4	37.4	40.5	36.8	33.4
BU16NO	380914	404898	Roadside	90.6	90.6	32.5	36.1	39.0	34.8	31.7
BU17NO	381105	404279	Roadside	81.1	81.1	25.7	28.2	28.6	26.8	24.3
BU18NO	382071	411362	Roadside	83.0	83.0	27.9	30.3	30.3	30.2	25.7
BU19NO	381321	405115	Roadside	90.6	90.6	32.7	33.1	37.7	33.5	29.1
BU20NO	382974	405930	Urban Background	81.1	81.1	26.1	28.4	28.8	27.6	24.1
Manchester City Council										
MA9ANO	384601	398303	Kerbside	90.6	90.6	32.5	35.7	37.5	36.2	33.8
MA24NO	383968	398070	Kerbside	100.0	100.0	26.8	31.8	32.4	29.8	27.2
MA26ANO	383973	398874	Urban Background	90.6	90.6	22.9	25.9	27.5	24.5	24.6
MA29ANO	384119	397503	Roadside	90.6	90.6	39.0	44.8	49.8	49.6	51.3
MA37NO	382829	391493	Roadside	100.0	100.0	26.9	29.5	32.1	28.5	28.6
MA59NO, MA60NO, MA61NO	384310	398337	Urban Background	100.0	100.0	22.4	24.6	25.3	24.4	24.4

MA71NO	385161	398290	Roadside	100.0	100.0	31.4	34.2	34.4	30.7	29.0
MA72NO	384761	397384	Urban Background	100.0	100.0	24.5	27.5	26.3	24.3	24.0
MA73NO	388604	396042	Roadside	100.0	100.0	27.3	31.6	31.5	29.5	28.0
MA75NO	387363	394617	Kerbside	100.0	100.0	33.7	39.0	38.8	39.6	37.2
MA77NO	383576	397489	Urban Background	100.0	100.0	26.9	30.8	33.1	31.6	28.4
MA81NO	386589	394083	Urban Background	100.0	100.0	16.6	18.1	18.8	17.0	16.3
MA82NO, MA83NO, MA84NO	384239	397276	Roadside	100.0	100.0	34.1	40.7	42.6	41.4	41.7
MA88NO	384469	398981	Kerbside	100.0	100.0	30.1	36.8	35.7	32.7	30.3
MA88ANO	386536	396699	Roadside	100.0	100.0	32.5	35.3	39.2	36.1	31.9
MA90BNO, MA91BNO, MA92BNO	384202	386121	Suburban	100.0	100.0	13.8	14.1	15.2	14.2	13.9
MA93BNO	382419	390010	Roadside	100.0	100.0	29.4	33.8	34.0	31.0	30.4
MA95BNO	386668	397566	Roadside	81.1	81.1	31.5	34.1	33.7	31.5	27.3
MA96BNO	385189	397167	Roadside	100.0	100.0	36.4	41.0	43.5	39.7	36.4
MA99BNO	385400	399245	Roadside	92.5	92.5	26.9	32.9	32.7	31.3	27.5
MA100BNO	383605	402293	Roadside	75.0	75.0	31.2	33.6	33.0	30.6	27.2
MA101BNO	385999	402026	Roadside	100.0	100.0	28.1	35.9	35.6	34.9	32.1

MA102BNO	385792	402952	Roadside	100.0	100.0	28.3	31.0	32.8	32.2	27.6
MA103BNO	385431	400653	Roadside	100.0	100.0	35.5	39.6	40.1	37.9	35.4
MA104BNO	383511	399906	Roadside	100.0	100.0	30.6	36.4	37.9	34.5	31.1
MA112BNO	383987	396734.5	Roadside	100.0	100.0	-	21.4	22.7	19.8	19.3
MA113BNO	385087	396891	Roadside	92.5	92.5	-	28.1	29.2	28.2	27.6
Oldham Metropolitan Borough Council										
OLMRNO	390746	405397	Roadside	100.0	100.0	37.7	28.6	35.0	28.4	22.1
OLSHSNO	390394	405454	Roadside	100.0	100.0	25.1	29.8	29.6	29.1	25.9
OL259BNO	390089	404456	Roadside	100.0	100.0	-	34.5	34.9	32.3	31.2
OL1RANO	388698	404903	Roadside	100.0	100.0	-	24.1	26.0	24.0	21.9
OL484BNO	389367	403280	Urban Background	100.0	100.0	-	-	-	27.1	25.2
OLOBNO	389789	403685	Roadside	43.4	43.4	27.2	27.8	28.2	32.5	22.3
OLPSNO	388747	400973	Urban Background	100.0	100.0	-	32.5	30.7	30.4	26.1
OLWARNO	389237	401310	Roadside	100.0	100.0	-	32.4	33.4	33.7	27.9
OLHRNO	390756	402571	Roadside	92.5	92.5	30.1	32.6	33.9	32.3	28.1
OLIRSNO	390675	402736	Urban Background	100.0	100.0	-	25.7	27.9	29.0	23.4

OL368MRNO	390976	403252	Roadside	100.0	100.0	-	38.2	38.9	37.1	33.0
OLESNO	391367	404318	Roadside	100.0	100.0	-	27.9	29.1	27.0	25.3
OLARNO	392771	402951	Roadside	100.0	100.0	23.7	25.5	26.4	25.6	22.8
OLWOODNO	393056	404638	Urban Background	100.0	100.0	-	31.1	31.4	28.3	25.7
OLWSMSNO	392947	404854	Roadside	100.0	100.0	-	38.2	37.1	26.7	24.8
OL17SRNO	393643	405343	Kerbside	100.0	100.0	-	39.9	40.4	38.3	35.0
OLHS2NO	393501	405186	Roadside	100.0	100.0	-	25.6	26.1	26.1	23.2
OLRRNO	394210	405752	Roadside	100.0	100.0	28.6	32.4	30.2	28.4	24.6
OLHURNO	395561	405751	Roadside	100.0	100.0	27.0	30.9	28.5	28.7	24.4
OLCVNO	399533	404454	Roadside	100.0	100.0	14.5	15.3	15.4	15.8	13.3
OLHSNO	399589	405511	Roadside	100.0	100.0	22.8	25.2	25.8	25.4	21.0
OLCW1NO, OLCW2NO, OLCW3NO	393884	409183	Roadside	100.0	100.0	24.2	28.9	26.6	25.5	22.5
OL21SRNO	392217	407255	Roadside	100.0	100.0	-	46.3	43.8	45.0	41.3
OLJSNO	393097	406897	Urban Background	100.0	100.0	-	24.2	23.4	23.0	19.5
OLRDNO	392111	406432	Roadside	100.0	100.0	25.9	27.4	29.8	30.1	24.7
OL12ORNO	392045	407608	Roadside	100.0	100.0	-	43.2	47.0	43.6	37.4

OLFANO	391100	406218	Urban Background	67.9	67.9	-	18.4	20.7	17.8	16.4
OLSMWNO	392748	405294	Urban Background	85.7	49.1	-	-	-	-	19.8
OLLSNO	392646	405286	Roadside	100.0	58.5	-	-	-	-	22.8
OLSWNO	392622	405289	Roadside	100.0	58.5	-	-	-	-	23.6
Rochdale Metropolitan Borough Council										
RO2ANO	388537	409942	Urban Background	100.0	90.6	-	-	-	31.0	24.5
RO3ANO	388581	409797	Urban Background	66.0	66.0	16.0	16.4	17.0	16.4	14.4
RO4ANO	387080	406278	Urban Background	49.1	49.1	22.2	22.8	22.7	23.0	20.3
RO5ANO	386870	404044	Roadside	100.0	100.0	16.5	16.4	16.4	14.2	15.1
RO6ANO	385413	408320	Kerbside	100.0	100.0	31.8	32.3	34.7	28.9	24.3
RO7ANO	388603	411925	Urban Background	92.5	92.5	25.2	27.7	26.4	26.1	22.6
RO8ANO	388932	412091	Roadside	0.0	0.0	33.6	36.6	36.3	32.1	-
RO9ANO	389057	412217	Kerbside	0.0	0.0	30.3	34.9	36.4	26.6	-
RO10ANO	388800	413603	Urban Background	50.9	50.9	14.8	14.9	15.0	13.4	12.3
RO12ANO	392072	415687	Roadside	0.0	0.0	30.4	30.3	31.0	29.3	27.2
RO13ANO	392042	415707	Urban Background	100.0	100.0	14.1	15.1	19.9	-	-

RO14ANO	393665	417816	Rural	90.6	90.6	11.6	10.2	12.9	11.6	9.4
RO15ANO	392976	411906	Roadside	7.5	7.5	20.3	23.0	19.7	20.1	-
RO16ANO	392542	411709	Urban Background	100.0	100.0	18.8	18.3	19.5	16.8	15.1
RO17ANO	391214	412609	Urban Background	100.0	100.0	18.5	17.6	24.5	17.3	14.5
RO18ANO	389877	413590	Urban Background	100.0	100.0	20.9	18.7	22.7	18.1	15.3
RO20ANO	385748	408931	Roadside	100.0	100.0	23.9	24.9	24.3	29.6	30.2
RO21ANO	385820	410776	Roadside	100.0	100.0	28.3	28.2	27.7	26.1	26.3
RO22ANO	390464	411976	Roadside	83.0	83.0	31.5	32.7	32.2	30.2	26.5
RO23ANO	390377	412030	Roadside	92.5	92.5	27.6	31.4	31.7	29.8	26.1
RO24ANO	388089	410822	Urban Background	100.0	100.0	24.8	23.1	24.0	25.2	20.2
RO25ANO	387792	406013	Roadside	25.0	25.0	25.9	30.9	33.0	31.1	-
RO26ANO	389782	414241	Roadside	17.0	17.0	31.1	32.5	34.2	27.6	-
RO27ANO	390710	414563	Roadside	92.5	92.5	32.7	28.8	31.3	32.6	28.4
RO28ANO	392871	415127	Urban Background	100.0	100.0	21.3	22.8	23.3	22.6	21.2
RO29ANO, RO30ANO, RO31ANO	389325	411411	Roadside	100.0	100.0	-	31.1	30.6	23.1	26.5
RO32ANO	385145	407701	Roadside	0.0	0.0	-	26.6	30.3	27.9	-

Salford City Council										
SA1NO	372767	394104	Urban Background	100.0	100.0	14.7	15.5	15.8	13.8	12.5
SA2NO	372140	394210	Urban Background	100.0	100.0	13.3	15.5	15.4	14.0	12.9
SA4NO	377453	401830	Urban Background	100.0	100.0	18.8	20.2	20.2	18.9	16.9
SA9NO	374741	400937	Urban Background	100.0	100.0	18.1	18.5	19.3	18.1	16.7
SA13NO	379613	399784	Urban Background	84.9	84.9	17.0	16.7	17.6	15.5	15.4
SA16NO	371187	404453	Urban Background	100.0	100.0	14.2	17.6	18.4	17.7	17.1
SA20NO, SA21NO, SA22NO	374811	400857	Roadside	100.0	100.0	31.6	33.0	34.8	33.1	30.2
SA23NO, SA24NO, SA29NO	377926	398727	Urban Background	100.0	100.0	18.5	20.5	20.2	18.8	16.5
SA25NO	381304	398014	Urban Background	100.0	100.0	21.2	24.7	22.7	21.9	19.7
SA26NO	380718	399597	Roadside	100.0	100.0	23.9	25.8	25.4	24.5	22.2
SA27NO	383078	398741	Roadside	100.0	100.0	26.7	28.8	27.2	24.6	24.0
SA31NO	374025	401905	Roadside	92.5	92.5	21.3	23.5	22.9	21.8	19.3
SA34NO	375367	397800	Roadside	100.0	100.0	30.4	34.1	33.8	31.2	28.5
SA38NO	377796	403065	Roadside	100.0	100.0	19.6	21.6	21.7	18.9	18.0
SA51NO	375213	397661	Roadside	100.0	100.0	25.0	26.5	26.0	24.8	22.3

SA55NO	372871	400734	Roadside	100.0	100.0	24.1	24.6	24.4	21.8	19.6
SA56NO, SA57NO, SA58NO	368759	396027	Rural	100.0	100.0	11.2	11.5	11.9	10.8	9.7
SA59NO	381822	397895	Roadside	100.0	100.0	23.0	27.5	26.2	24.5	22.8
SA60NO	382445	397724	Roadside	100.0	100.0	27.0	32.6	32.1	30.4	27.5
SA61NO	377269	400943	Roadside	84.9	84.9	28.8	34.0	33.3	31.3	30.9
SA63NO	374673	399912	Roadside	100.0	100.0	29.7	35.3	38.0	33.1	31.2
SA64NO	378805	399848	Roadside	100.0	100.0	20.5	21.5	23.4	20.2	18.4
SA65NO	378584	399220	Roadside	100.0	100.0	36.6	37.9	37.7	36.1	30.5
SA66NO	375118	398502	Roadside	100.0	100.0	23.9	25.7	25.3	24.5	22.2
SA68NO	373570	403096	Roadside	100.0	100.0	34.4	44.3	38.7	39.1	33.7
SA69NO	379397	401370	Roadside	100.0	100.0	36.0	36.8	39.9	37.3	31.7
SA70NO	381677	398832	Roadside	100.0	100.0	24.3	23.4	22.8	21.2	19.8
SA72NO	377536	401804	Roadside	100.0	100.0	36.6	38.8	37.4	36.7	32.5
SA73NO	374576	400611	Roadside	100.0	100.0	34.8	38.5	39.7	29.4	31.1
SA74NO	376315	399249	Roadside	100.0	100.0	29.3	30.5	31.9	31.9	26.9
SA75NO	379608	398539	Roadside	100.0	100.0	24.0	25.2	27.2	25.6	22.0

SA76NO	380540	398422	Roadside	100.0	100.0	28.5	31.3	29.0	27.2	25.3
SA77NO	381686	398504	Roadside	100.0	100.0	23.2	25.8	26.5	25.1	22.9
SA78NO	381220	399530	Roadside	100.0	100.0	36.2	39.6	40.5	38.8	32.7
SA79NO	382602	398519	Roadside	100.0	100.0	27.3	30.0	30.8	29.5	28.5
SA80NO	375428	401417	Roadside	100.0	100.0	23.6	25.5	25.6	23.8	22.1
SA82NO	375394	397816	Roadside	100.0	100.0	36.9	39.6	40.1	37.8	33.8
SA83NO	382945	400732	Roadside	92.5	92.5	-	25.2	25.5	23.2	19.9
SA84NO	380776	400834	Roadside	100.0	100.0	-	25.1	24.6	23.9	21.3
SA85NO	375991	399237	Roadside	100.0	100.0	-	22.3	21.6	20.7	18.7
SA86NO	383819	401771	Kerbside	92.5	92.5	-	44.0	45.2	43.2	38.9
SA87NO	372225	395616	Roadside	100.0	100.0	-	23.7	23.0	21.8	20.4
SA89NO	373892	404569	Roadside	100.0	100.0	-	-	27.7	25.4	22.3
SA90NO	381349	397162	Roadside	90.6	90.6	-	-	-	-	20.8
SA91NO, SA92NO, SA93NO	382580	397717	Roadside	100.0	100.0	-	-	-	-	37.8
Stockport Metropolitan Borough Council										
ST3NO	388547	391845	Urban Background	100.0	100.0	19.0	19.5	19.4	19.6	17.3

ST4NO	396469	390800	Rural	100.0	100.0	9.6	10.9	11.1	11.2	10.0
ST5NO	396869	382699	Rural	100.0	100.0	6.3	9.7	6.8	5.7	5.9
ST6NO	385960	388552	Urban Background	92.5	92.5	11.9	9.7	12.9	12.0	12.4
ST7NO	392063	386972	Kerbside	90.6	90.6	26.3	25.9	26.4	25.0	24.2
ST8NO	392016	387042	Urban Background	100.0	100.0	14.0	17.2	16.1	15.7	13.7
ST9NO	392742	385680	Urban Background	100.0	100.0	9.7	10.9	10.5	9.3	9.3
ST10NO	392781	387271	Urban Background	0.0	0.0	10.8	11.6	11.3	11.2	-
ST11NO	391083	387938	Roadside	100.0	100.0	21.9	24.4	23.9	23.4	21.8
ST13NO	384675	386295	Urban Background	100.0	100.0	11.6	13.6	13.3	12.5	12.2
ST2NO, ST12NO, ST14NO	385047	388339	Roadside	100.0	100.0	26.1	28.4	29.6	27.1	24.7
ST15NO	389886	388961	Roadside	100.0	100.0	21.0	23.7	22.0	21.4	19.7
ST16NO	391568	391225	Roadside	92.5	92.5	18.3	19.6	20.1	20.2	19.5
ST17NO	388442	390077	Urban Background	100.0	100.0	18.4	20.2	19.0	19.4	18.2
ST18NO	389272	390440	Urban Background	92.5	92.5	26.5	29.3	26.7	28.5	24.3
ST19NO	389479	393463	Roadside	90.6	90.6	30.5	32.2	31.6	30.7	27.0
ST20NO	386921	389528	Urban Background	100.0	100.0	29.6	32.2	30.2	30.7	29.2

ST21NO	388598	389415	Urban Background	100.0	100.0	15.2	18.4	16.7	16.8	15.3
ST22NO, ST23NO, ST24NO	391481	387637	Roadside	100.0	100.0	16.4	18.5	17.7	17.0	16.5
ST25NO	395770	388655	Roadside	83.0	83.0	19.5	21.5	24.8	20.0	18.2
ST26NO	389396	387357	Urban Background	92.5	92.5	11.0	12.1	11.5	10.8	10.6
ST27NO	387091	391384	Urban Background	100.0	100.0	12.6	13.1	13.1	12.2	11.8
ST28NO	385700	386219	Roadside	90.6	90.6	25.7	30.3	30.3	27.6	25.9
ST29NO	390087	388545	Urban Background	100.0	100.0	13.1	14.3	13.3	12.5	12.4
ST31NO	392442	391752	Roadside	15.1	15.1	30.1	31.0	30.9	23.5	-
ST32NO	389480	390957	Roadside	100.0	100.0	24.8	24.6	27.7	25.5	22.7
ST33NO	390416	390087	Roadside	100.0	100.0	25.8	29.8	28.8	26.2	25.6
ST34NO	388304	390351	Roadside	83.0	83.0	29.0	35.8	36.0	32.9	30.5
ST35NO	395020	385360	Roadside	100.0	100.0	18.6	23.5	20.6	19.1	18.1
ST36NO	389386	390142	Roadside	100.0	100.0	-	34.7	35.8	34.3	32.6
Tameside Metropolitan Borough Council										
TA1NO	394051	397180	Roadside	100.0	100.0	21.4	21.1	22.4	21.4	19.0
TA2NO	394788	394933	Roadside	66.0	66.0	18.3	21.2	20.7	19.2	20.0

TA3NO	390961	395417	Urban Background	100.0	100.0	19.6	21.9	21.8	21.2	18.5
TASPNO	394194	399267	Roadside	92.5	92.5	-	-	-	27.5	24.0
TA5NO	400488	396539	Urban Background	100.0	100.0	10.0	9.8	9.8	9.6	8.5
TA11NO	400390	396025	Roadside	100.0	100.0	39.9	41.1	43.9	43.2	38.4
TA13NO	392586	398431	Roadside	100.0	100.0	30.5	33.6	33.9	32.3	29.9
TA14NO	393696	398794	Roadside	75.0	75.0	28.9	31.3	32.1	28.9	28.4
TA16NO	391413	397974	Roadside	100.0	100.0	30.9	33.2	34.5	33.8	29.4
TA17NO	389106	398242	Roadside	100.0	100.0	26.6	28.7	29.0	27.5	24.3
TA18NO	391970	395521	Roadside	100.0	100.0	32.1	36.5	38.3	34.7	29.0
TA19NO	392477	395505	Roadside	100.0	100.0	27.1	29.5	26.9	27.6	25.7
TA20NO	394610	395102	Roadside	90.6	90.6	28.3	29.9	30.2	29.6	25.7
TA21NO	400423	395965	Roadside	100.0	100.0	36.7	37.9	39.0	36.4	36.0
TA23NO	393630	398598	Urban Background	100.0	100.0	17.4	18.7	19.3	17.3	15.7
TA24NO	390475	395621	Roadside	100.0	100.0	24.7	31.6	26.6	31.0	24.8
TA25NO	396950	402329	Roadside	75.0	75.0	21.9	19.8	21.1	20.7	17.6
TA27NO	396177	398218	Roadside	90.6	90.6	20.7	22.5	22.1	21.0	19.0

TA28NO	393050	401038	Roadside	100.0	100.0	27.8	31.4	31.4	31.1	23.8
TA29NO	393370	399494	Suburban	100.0	100.0	18.4	19.0	20.6	19.8	16.4
TA30NO	393419	399691	Roadside	92.5	92.5	27.3	31.1	31.4	31.4	28.4
TA31NO	396899	402449	Suburban	100.0	100.0	15.9	16.1	16.7	15.9	15.3
TA32NO	396982	402437	Suburban	100.0	100.0	18.5	20.1	19.9	19.6	16.7
TA33NO	397011	402591	Roadside	100.0	100.0	18.2	19.2	19.9	18.8	18.2
TA34NO	397060	402581	Roadside	100.0	100.0	18.7	17.9	19.5	19.5	16.4
TA35NO	397080	402540	Roadside	100.0	100.0	27.7	29.1	30.4	31.3	27.3
TA36NO	397060	402387	Suburban	100.0	100.0	16.1	17.0	16.5	15.9	14.2
TA37NO	396728	402073	Roadside	100.0	100.0	26.6	27.7	28.1	26.8	22.8
TA38NO	394006	399392	Urban Background	100.0	100.0	22.0	23.4	23.0	23.3	21.4
TA39NO	394114	399366	Urban Background	100.0	100.0	24.5	25.9	25.8	25.0	25.7
TA40NO	394066	399314	Urban Background	100.0	100.0	22.3	23.5	24.3	22.9	21.0
TA41NO	394118	399259	Urban Background	100.0	100.0	25.3	25.9	28.1	25.2	24.0
TA42NO	394494	399010	Urban Background	100.0	100.0	21.3	24.5	23.5	23.0	24.3
TA43NO	394204	398933	Roadside	100.0	100.0	31.2	33.2	35.3	33.0	25.9

TA44NO	397418	394398	Urban Background	100.0	100.0	12.1	12.2	12.1	11.4	10.3
TA45NO, TA46NO, TA47NO	399719	395805	Roadside	100.0	100.0	38.1	39.7	39.1	40.9	35.6
TA48NO	392699	395733	Roadside	0.0	0.0	-	-	-	-	-
TA49NO	393731	398770	Roadside	100.0	100.0	27.3	30.8	28.8	27.1	24.8
TA50NO	393498	398704	Roadside	100.0	100.0	33.6	35.4	32.0	33.3	30.7
TA51NO	393314	398624	Kerbside	100.0	100.0	29.7	33.1	32.2	31.0	27.8
TA52NO	393509	398737	Roadside	100.0	100.0	32.9	35.3	36.9	35.3	32.4
TA53NO	393133	398536	Roadside	100.0	100.0	28.3	31.8	30.2	30.3	27.1
TA54NO	392958	398474	Roadside	83.0	83.0	36.6	39.9	41.5	36.9	35.0
TA55NO	392741	398469	Roadside	100.0	100.0	40.8	42.5	45.9	45.2	37.3
TA56NO	392490	398368	Roadside	90.6	90.6	32.8	35.6	35.5	34.8	30.8
TA57NO	392838	398533	Roadside	100.0	100.0	36.8	35.2	32.9	30.0	30.8
TA58NO	393080	398620	Roadside	100.0	100.0	26.9	29.7	29.6	28.6	25.3
TA59NO	395652	399140	Roadside	100.0	100.0	15.0	15.9	15.1	14.1	13.7
TA60NO	395747	399112	Roadside	100.0	100.0	20.2	21.5	20.2	19.3	18.4
TA61NO	395682	399171	Roadside	100.0	100.0	18.2	20.3	19.0	18.4	16.6

TA62NO	395589	399227	Roadside	100.0	100.0	17.1	17.2	18.4	17.7	15.9
TA63NO	394917	400922	Kerbside	100.0	100.0	-	23.8	24.4	24.1	21.4
TA64NO	395787	398769	kerbside	100.0	100.0	-	37.4	36.7	36.7	32.0
TA65NO	392532	396768	Kerbside	100.0	100.0	-	-	28.0	27.1	23.7
Trafford Metropolitan Borough Council										
TR5NO	379052	392043	Urban Background	100.0	100.0	16.3	21.5	22.2	21.3	19.3
TR9NO	380933	395889	Urban Background	92.5	92.5	16.5	20.1	18.4	19.8	18.6
TR19NO, TR19ANO, TR19BNO	378783	394728	Urban Background	92.5	92.5	14.3	15.0	15.6	13.2	12.5
TR20NO, TR20ANO, TR20BNO	379411	394014	Roadside	100.0	100.0	20.9	23.9	23.4	22.4	21.1
TR22NO	377089	390130	Kerbside	100.0	92.5	22.7	22.9	31.7	29.8	24.8
TR15NO	379089	393282	Roadside	100.0	100.0	20.7	22.9	22.3	22.2	19.7
TR16NO, TR16ANO	377418	395689	Roadside	100.0	100.0	21.5	22.5	20.9	20.5	18.7
TR23NO	376432	396355	Roadside	100.0	100.0	25.1	26.0	24.8	24.3	22.1
TR24NO	379263	385812	Urban Background	100.0	100.0	15.6	19.8	19.1	18.5	17.5
TR25NO, TR25ANO, TR25BNO	373755	394477	Kerbside	100.0	100.0	12.9	11.5	11.3	11.3	9.5

TR27NO	371419	390760	Kerbside	92.5	100.0	18.6	16.1	15.4	17.5	15.4
TR28NO	376804	387740	Roadside	100.0	92.5	24.9	26.4	23.5	23.4	23.6
TR29NO	373906	392820	Kerbside	92.5	100.0	-	18.2	17.6	17.9	15.8
TR31NO	376205	392690	Roadside	100.0	92.5	-	31.3	29.0	27.7	25.4
Wigan Metropolitan Borough Council										
WI24NO	358341	405539	Roadside	100.0	100.0	-	-	-	22.2	19.6
WI33NO	359723	405537	Roadside	100.0	100.0	28.7	30.4	31.0	30.8	27.5
WI52NO	362137	396948	Roadside	100.0	100.0	27.1	30.5	29.7	26.8	25.0
WI81NO	355979	410362	Roadside	100.0	100.0	19.3	20.0	19.8	17.6	16.1
WI114NO	365115	400259	Roadside	92.5	92.5	30.2	32.1	32.8	29.4	29.1
WI148NO	361247	404576	Kerbside	92.5	92.5	21.1	24.2	22.8	22.7	21.9
WI156NO	366320	402136	Kerbside	100.0	100.0	19.5	20.1	19.8	18.9	17.3
WI161NO	369635	402019	Roadside	100.0	100.0	21.3	22.5	22.9	21.9	19.3
WI167NO	363544	397933	Roadside	100.0	100.0	18.7	20.6	19.2	19.2	17.0
WI168NO	362463	397005	Kerbside	100.0	100.0	24.8	25.4	25.0	24.3	21.5
WI169NO	362557	396906	Roadside	100.0	100.0	23.9	26.1	24.1	22.8	21.4

WI170NO	362236	396675	Roadside	90.6	90.6	21.4	22.7	21.4	19.3	18.7
WI172NO	356881	401314	Kerbside	92.5	92.5	22.0	25.1	23.9	21.9	19.9
WI177NO	356230	410105	Kerbside	100.0	100.0	20.5	23.5	22.1	20.5	18.9
WI178NO	356021	410128	Kerbside	100.0	100.0	30.3	35.2	33.3	32.5	28.6
WI180NO	362105	396491	Kerbside	100.0	100.0	41.9	44.6	45.3	42.4	39.1
WI181NO	354819	406235	Kerbside	100.0	100.0	22.1	28.2	28.6	25.8	23.5
WI186NO	358070	405587	Kerbside	100.0	100.0	31.8	33.2	33.1	-	33.1
WI188NO	362111	396526	Roadside	90.6	90.6	27.9	30.6	30.7	28.5	24.7
WI205NO	362151	396604	Kerbside	100.0	100.0	22.4	23.0	22.9	21.1	19.0
WI208NO, WI209NO, WI210NO	365686	400243	Roadside	100.0	100.0	21.8	24.0	23.7	22.3	22.0
WI213NO	362019	396512	Roadside	100.0	100.0	-	17.1	16.0	14.9	13.4
WI216NO	358464	405342	Kerbside	67.9	67.9	-	31.0	31.7	31.9	33.5
WI217NO	357780	405306	Kerbside	100.0	100.0	-	24.3	22.0	22.2	20.1
WI219NO	357484	405407	Roadside	100.0	100.0	-	19.3	17.9	18.9	18.0
WI220NO	357420	405407	Roadside	90.6	90.6	-	18.5	18.3	17.4	16.1
WI221NO	360499	397867	Roadside	100.0	100.0	-	20.9	21.8	19.6	17.7

WI222NO	360491	397842	Roadside	100.0	100.0	-	22.1	24.9	23.0	21.8
WI223NO	360430	397779	Roadside	92.5	92.5	-	20.7	22.4	20.9	18.9
WI224NO	360418	397775	Roadside	92.5	92.5	-	29.6	30.3	27.3	29.1
WI225NO	360459	397995	Roadside	100.0	100.0	-	19.9	20.5	19.7	17.7
WI226NO	360462	398006	Roadside	92.5	92.5	-	20.8	20.3	19.0	17.4
WI227NO	360576	398144	Roadside	90.6	90.6	-	25.1	23.9	21.4	21.0
WI228NO	360578	398126	Roadside	75.0	75.0	-	21.6	22.4	20.8	20.4
WI230NO	360380	397912	Roadside	92.5	92.5	-	27.1	29.1	27.0	23.9
WI231NO	357473	398990	Roadside	100.0	92.5	-	27.9	26.2	26.8	23.9
WI232NO	357635	399502	Roadside	100.0	100.0	-	19.0	19.3	16.9	15.8
WI233NO	357445	406461	Kerbside	90.6	90.6	-	19.7	22.1	18.7	17.0
WI234NO	363136	403467	Roadside	81.1	81.1	-	26.8	26.6	24.0	23.8
WI235NO	365419	399116	Roadside	100.0	100.0	-	21.3	19.7	17.8	17.0
WI236NO	365386	400353	Kerbside	83.0	83.0	-	16.4	16.4	14.4	14.8
WI237NO	367352	403200	Kerbside	90.6	90.6	-	20.4	21.0	20.2	19.1
WI238NO	369056	402146	Roadside	90.6	90.6	-	20.7	22.1	20.9	18.6

WI239NO	357092	404213	Roadside	100.0	100.0	-	-	15.3	13.9	14.5
WI240NO	360220	407146	Kerbside	100.0	100.0	-	20.4	19.2	19.0	15.8
WI241NO	358025	406658	Kerbside	100.0	100.0	-	24.3	23.3	23.1	19.3
WI244NO	357610	406859	Kerbside	100.0	100.0	-	-	18.5	19.3	17.4
WI245NO	358133	405492	Kerbside	92.5	92.5	-	-	-	43.8	40.7

☒ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

☒ Diffusion tube data has been bias adjusted.

☒ Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction.

Notes:

The annual mean concentrations are presented as $\mu\text{g}/\text{m}^3$.

Exceedances of the NO₂ annual mean objective of 40 $\mu\text{g}/\text{m}^3$ are shown in **bold**.

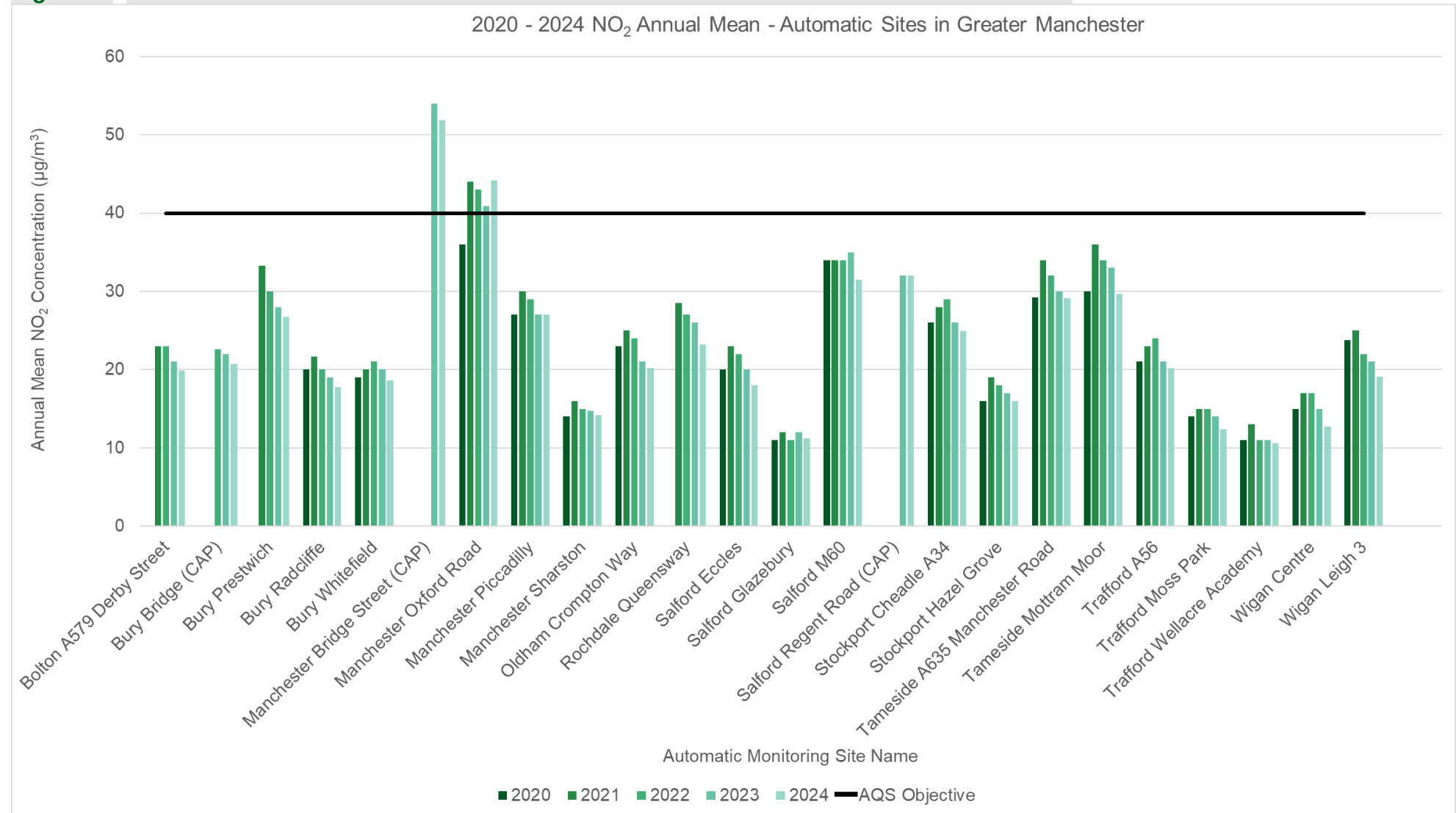
NO₂ annual means exceeding 60 $\mu\text{g}/\text{m}^3$, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A.1 – Trends in Annual Mean NO₂ Concentrations – Greater Manchester Automatic Sites

AQS – Air Quality Strategy Objective Limit

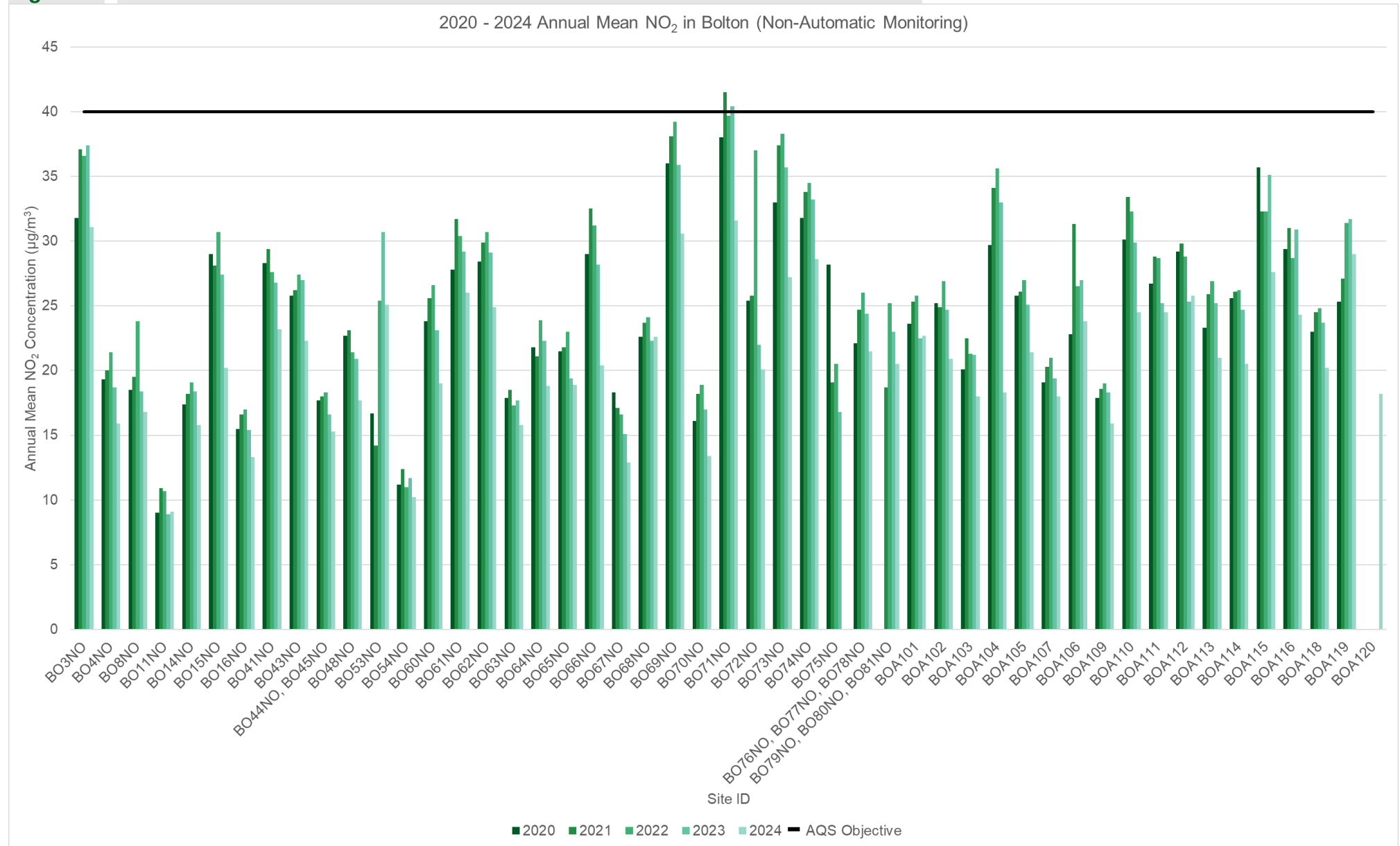
Figure A.2 – Trends in Annual Mean NO₂ Concentrations – Bolton Non-Automatic Sites

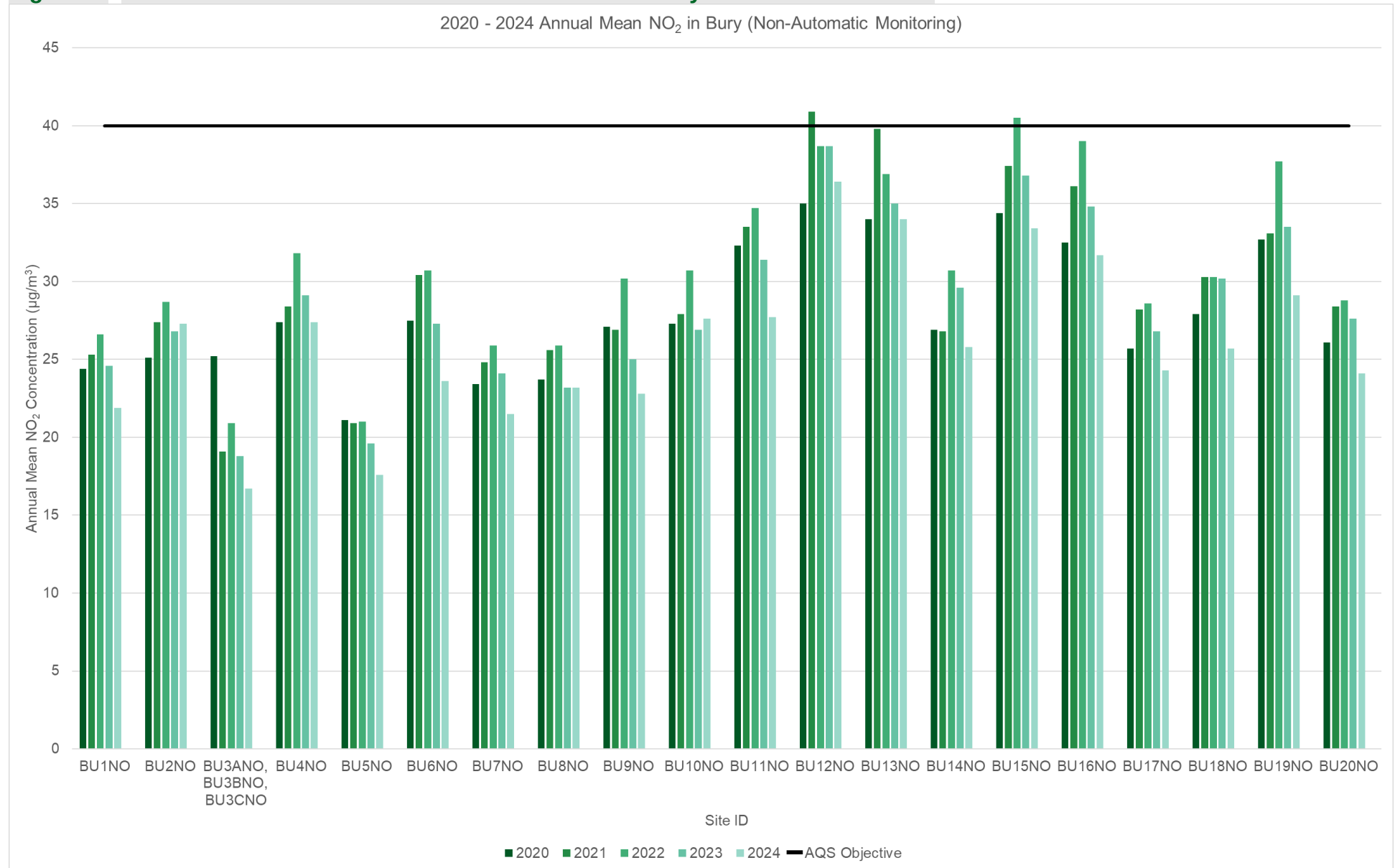
Figure A.3 – Trends in Annual Mean NO₂ Concentrations – Bury Non-Automatic Sites

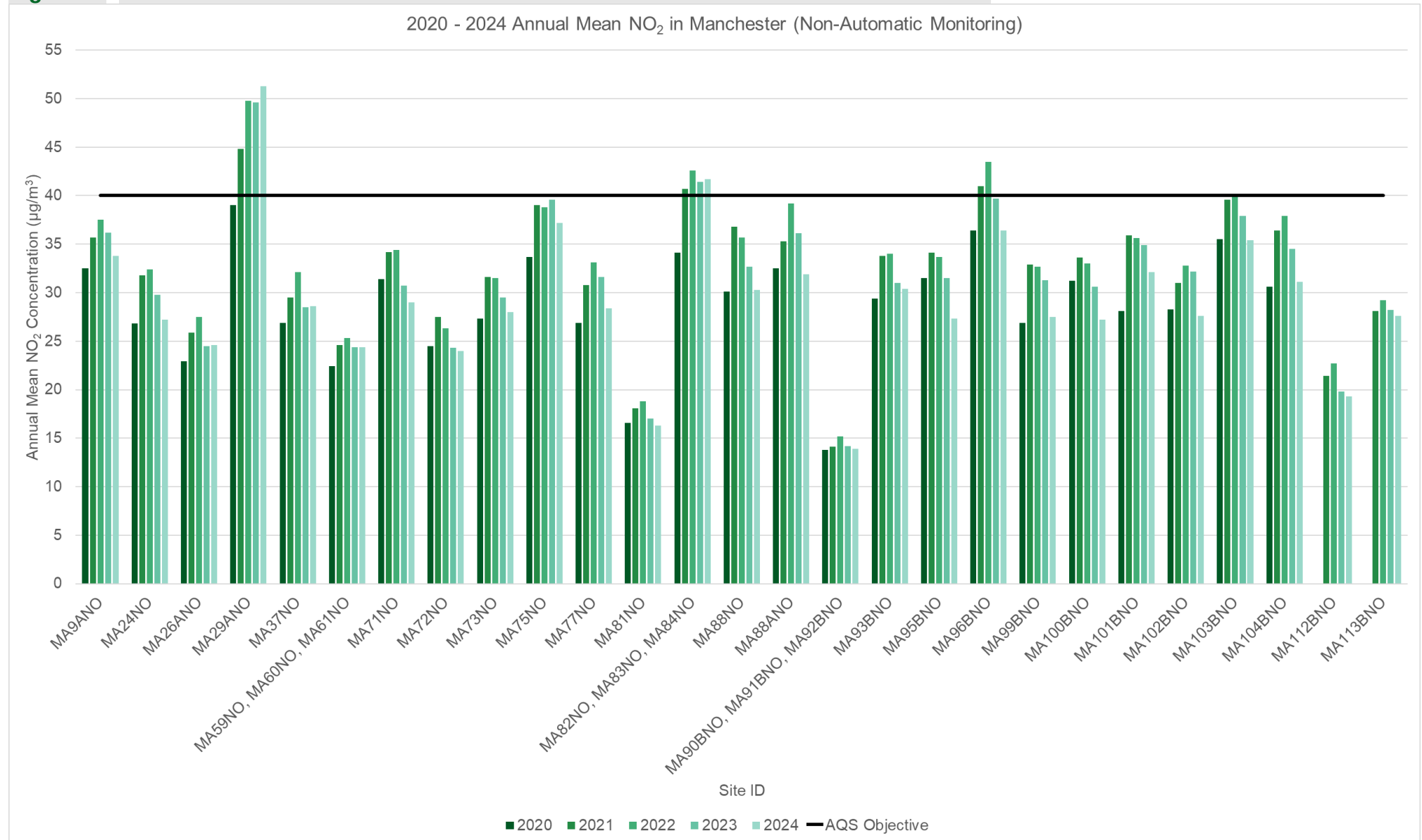
Figure A.4 – Trends in Annual Mean NO₂ Concentrations – Manchester Non-Automatic Sites

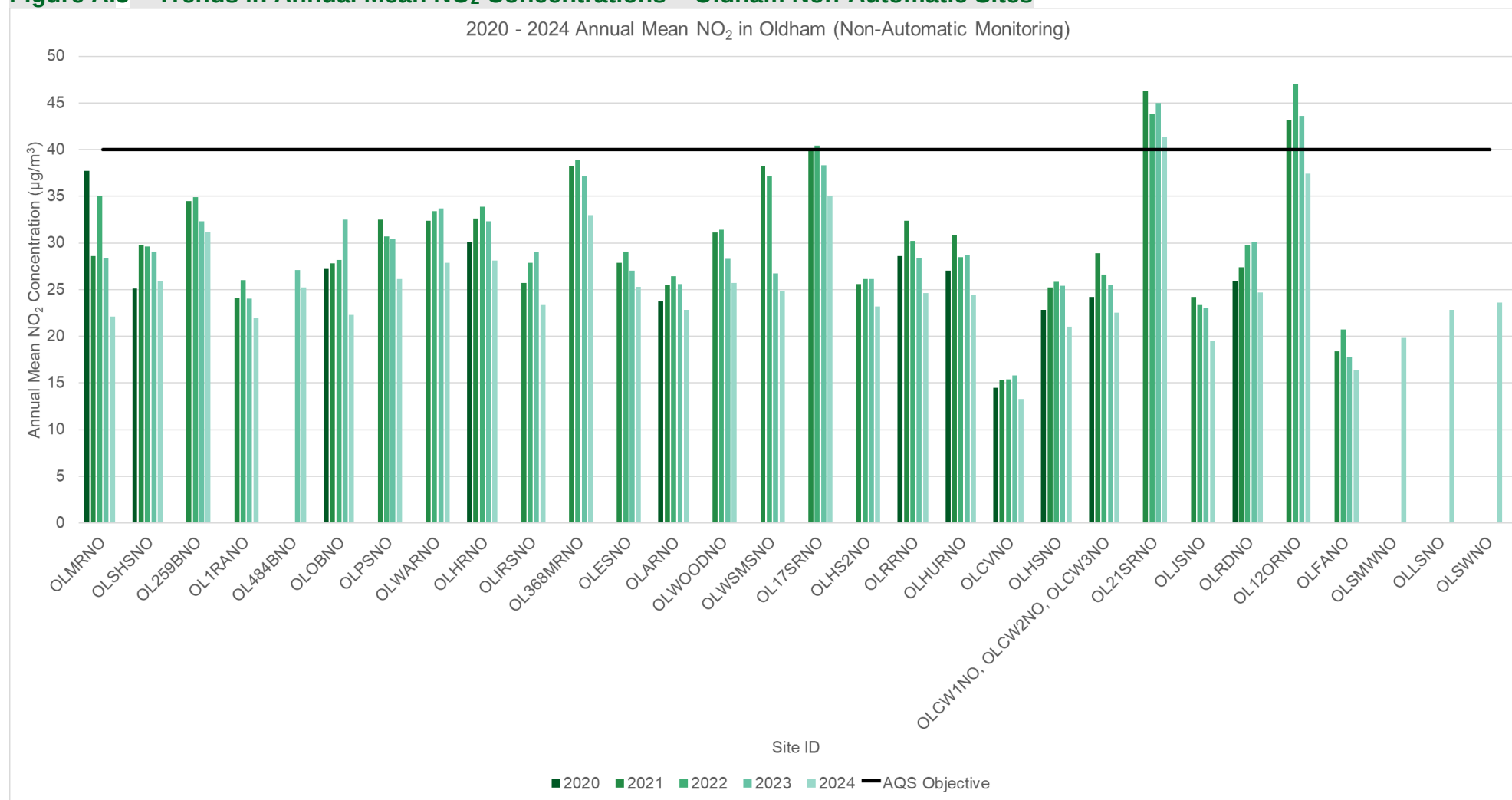
Figure A.5 – Trends in Annual Mean NO₂ Concentrations – Oldham Non-Automatic Sites

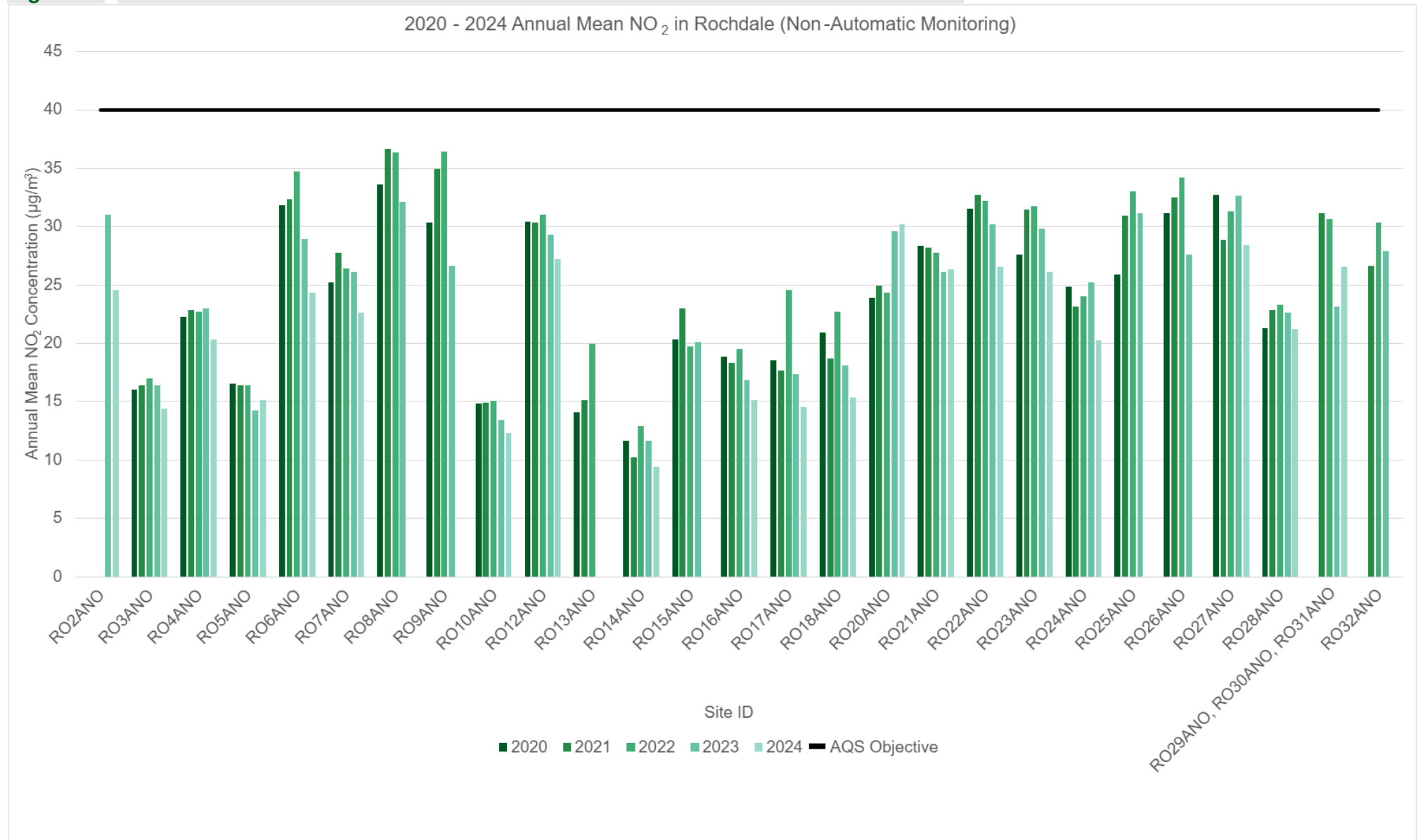
Figure A.6 – Trends in Annual Mean NO₂ Concentrations – Rochdale Non-Automatic Sites

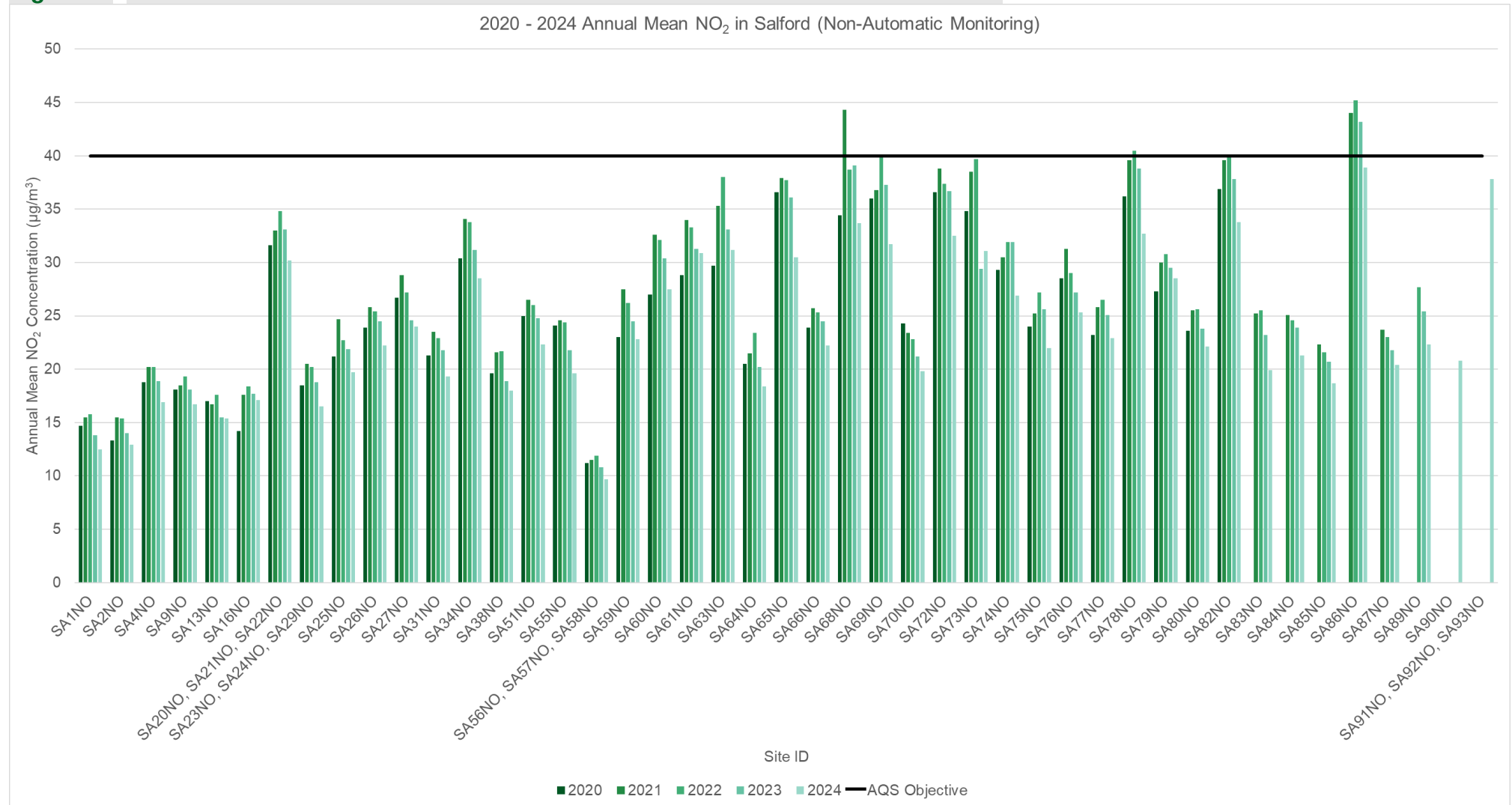
Figure A.7 – Trends in Annual Mean NO₂ Concentrations – Salford Non-Automatic Sites

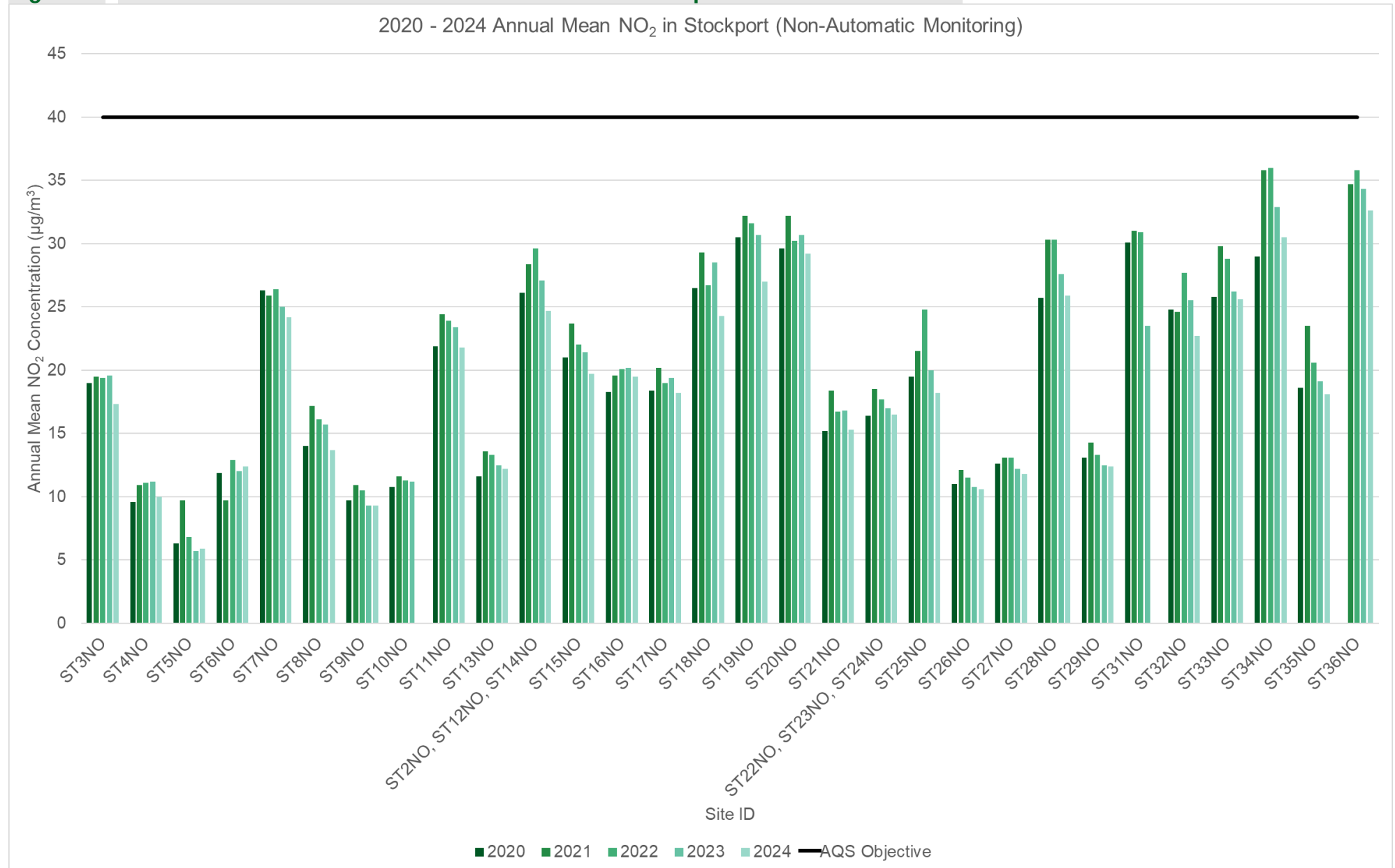
Figure A.8 – Trends in Annual Mean NO₂ Concentrations – Stockport Non-Automatic Sites

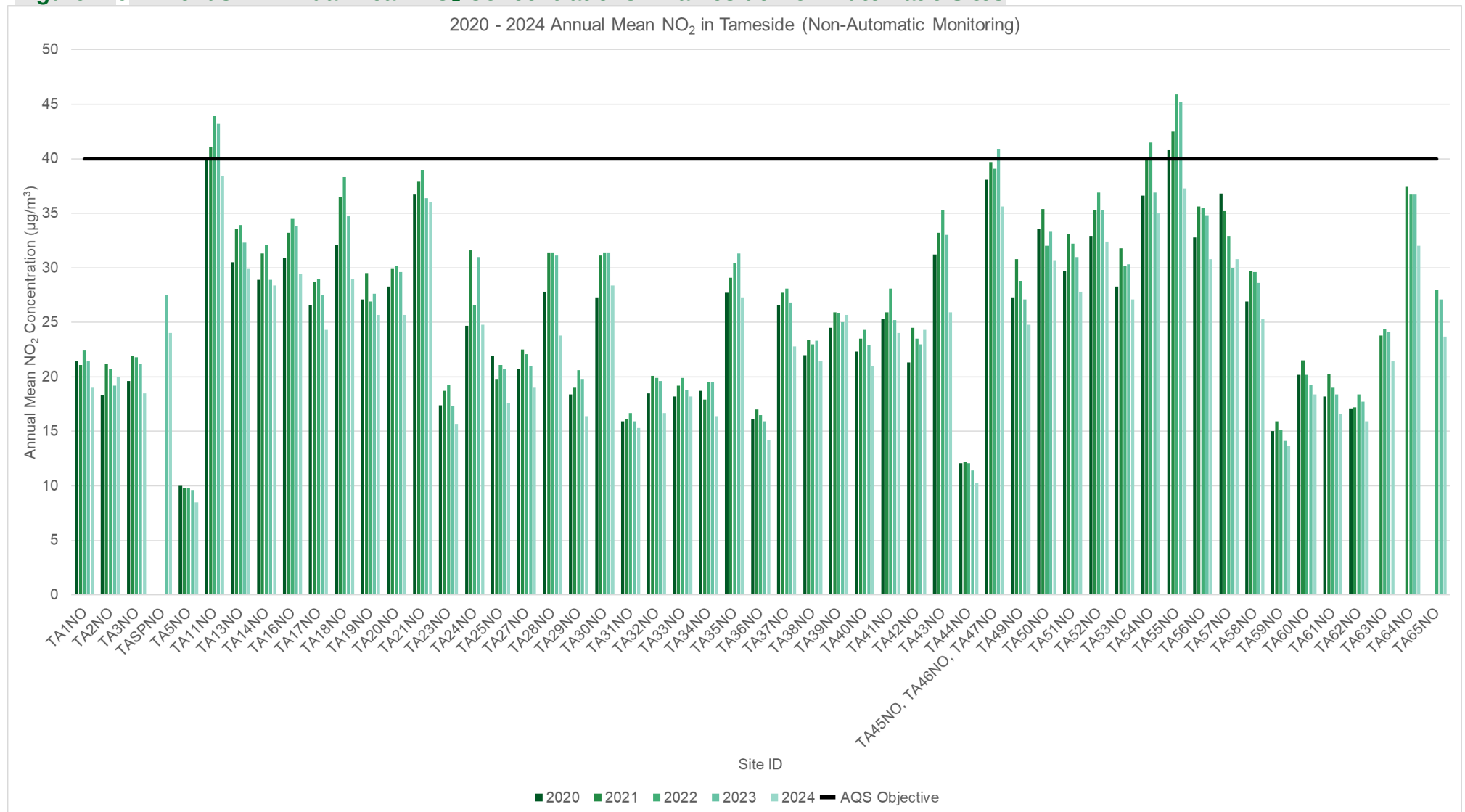
Figure A.9 – Trends in Annual Mean NO₂ Concentrations – Tameside Non-Automatic Sites

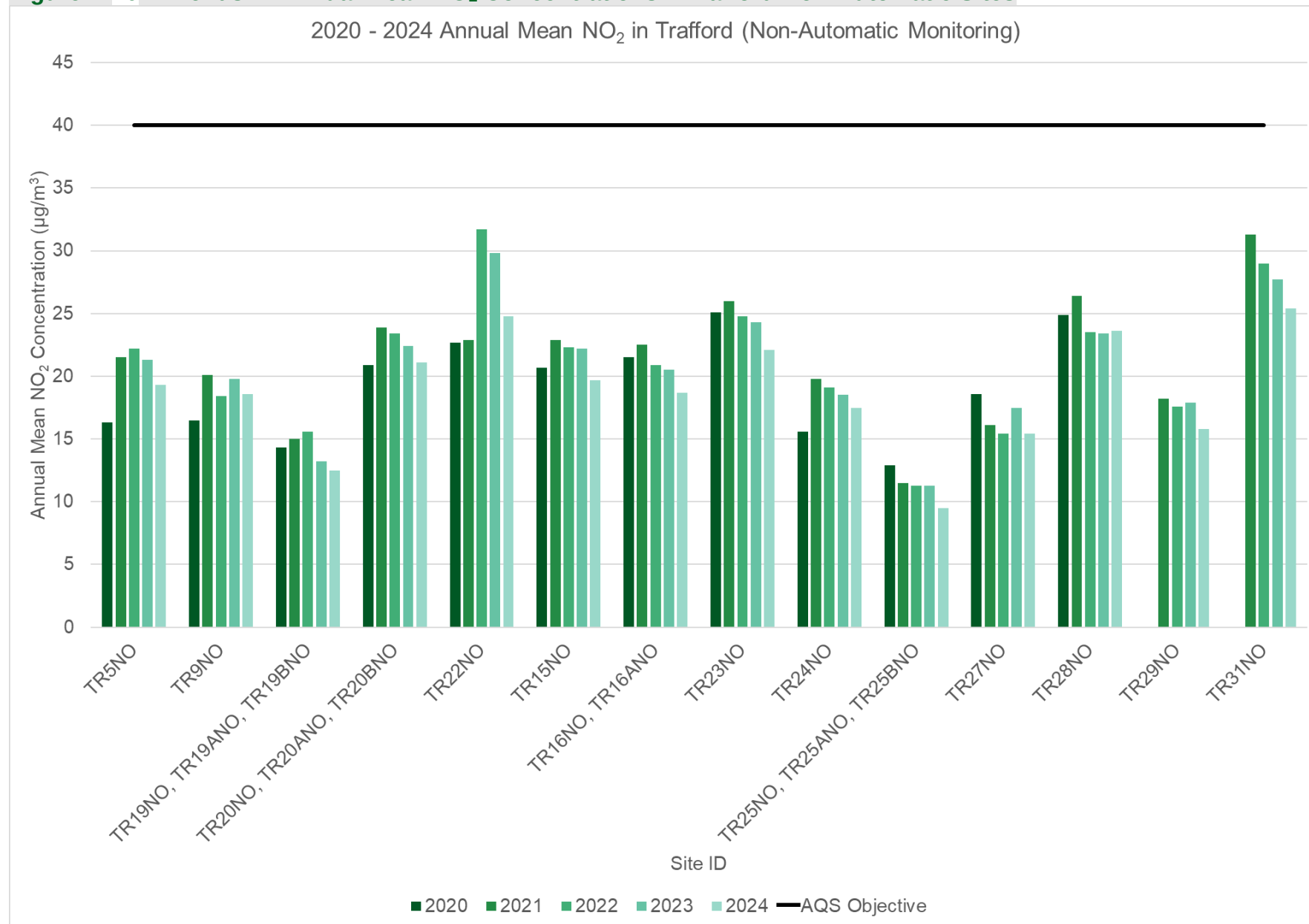
Figure A.10 – Trends in Annual Mean NO₂ Concentrations – Trafford Non-Automatic Sites

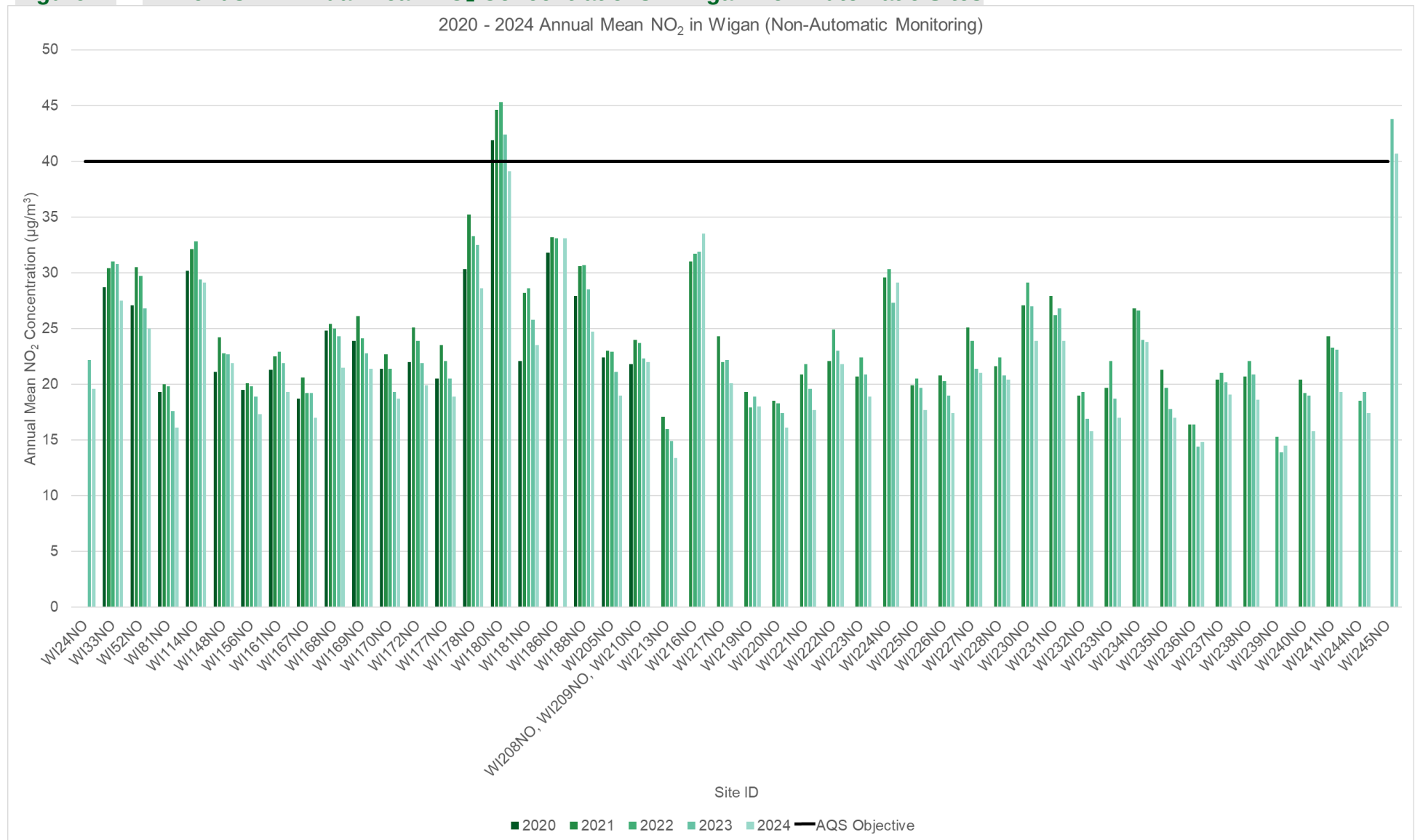
Figure A.11 – Trends in Annual Mean NO₂ Concentrations – Wigan Non-Automatic Sites

Table A.5 – 1-Hour Mean NO₂ Monitoring Results, Number of 1-Hour Means > 200 µg/m³

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Bolton A579 Derby Street	371296	408600	Roadside	99.8	99.8	0(92)	0	0	0	0
Bury Bridge (CAP)	379840	410944	Roadside	99.2	99.2	-	-	0(82)	0	0
Bury Radcliffe	378190	407480	Roadside	99.3	99.3	0	0(79)	0	0	0
Bury Prestwich	381650	403222	Roadside	99.2	99.2	0(91)	0(96)	0	0	0
Bury Whitefield	380636	406973	Roadside	93.3	93.3	0	0	0	0	0
Manchester Bridge Street (CAP)	383556	398292	Roadside	91.3	91.3	-	-	-	10	3
Manchester Oxford Rd	384239	397276	Kerbside	82.4	81.3	0	0	3	0	0 (142)
Manchester Piccadilly	384310	398337	Urban Centre	90.3	90.3	0	0	0	0	0
Manchester Sharston	384202	386121	Suburban	100.0	98.3	0	0	0	0	0
Oldham Crompton Way	393884	409183	Roadside	100.0	95.2	0	0	0	0	0
Rochdale Queensway	389325	411411	Roadside	98.6	98.6	-	0	0	0	0
Salford Eccles	377926	398727	Urban Background	100.0	94.5	0	0	0	0	0
Salford Glazebury	368759	396027	Rural	100.0	98.2	0	0	0	0	0
Salford M60	374811	400857	Roadside	99.2	99.2	0	0	0	0	0
Salford Regent Road (CAP)	382580	397717	Roadside	99.2	99.2	-	-	-	0	0

Stockport Cheadle A34	385047	388339	Roadside	99.1	99.1	0	0	0	0	0
Stockport Hazel Grove	391481	387637	Roadside	99.2	99.2	0	0	0	0	1
Tameside A635 Manchester Road	392538	398419	Roadside	99.5	99.5	0	0	0	0	0
Tameside Mottram Moor	399719	395804	Roadside	99.7	99.7	0	0	0	0	0
Trafford A56	379411	394014	Roadside	96.4	96.4	0	0	0	0	0
Trafford Moss Park	378783	394728	Urban Background	93.7	70.0	0	0	0(98)	0	0 (70)
Trafford Wellacre Academy	373755	394477	Urban Background	99.4	96.3	0	0	0	0	0
Wigan Centre	357816	406024	Urban Background	100.0	90.0	0	0	0	0	0
Wigan Leigh 3	365686	400243	Roadside	68.2	68.2	0(87)	0	0	0	0 (82)

Notes:

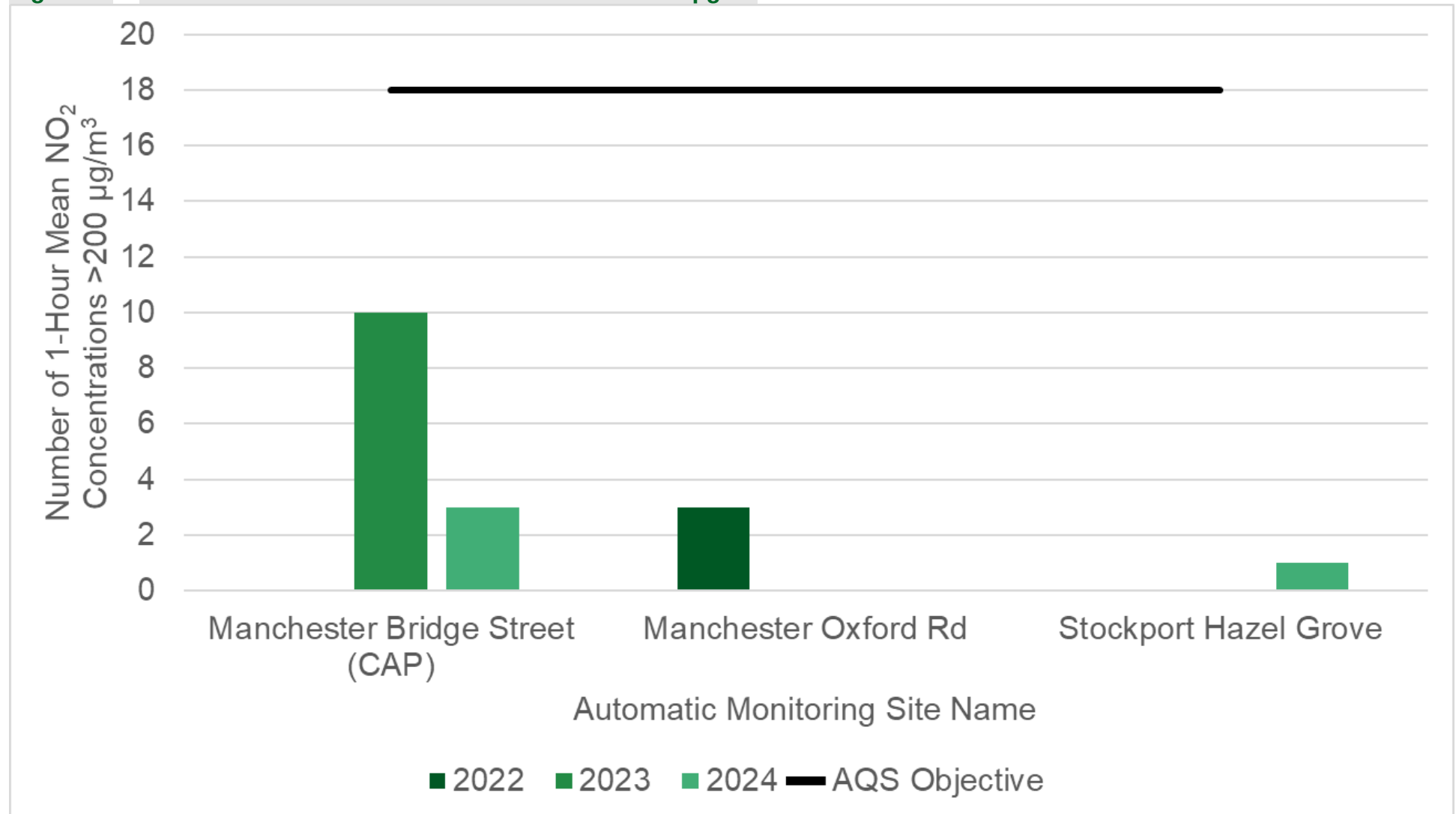
Results are presented as the number of 1-hour periods where concentrations greater than 200 µg/m³ have been recorded.

Exceedances of the NO₂ 1-hour mean objective (200 µg/m³ not to be exceeded more than 18 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A.12 – Trends in Number of NO₂ 1-Hour Means > 200 µg/m³

Only sites which recorded a 1-hour concentration above 200 µg/m³ between 2020 and 2024 have been included in this chart. No sites recorded concentrations above 200 µg/m³ in 2020 & 2021.

Table A.6 – Annual Mean PM₁₀ Monitoring Results (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Bolton A579 Derby Street	371296	408600	Roadside	75.7	75.7	-	17	19	16.1	16.4
Bury Prestwich	381650	403222	Roadside	98.7	98.7	-	17.5	19	17.3	16.3
Bury Radcliffe	378190	407480	Roadside	98.6	98.6	18	17	18	15.6	14.9
Bury Whitefield	380636	406973	Roadside	97.4	97.4	16	15	16	14.0	13.1
Manchester Oxford Road	384239	397276	Kerbside	81.1	81.1	18	18	18	17.5	20.5
Manchester Piccadilly	384310	398337	Urban Centre	100.0	78.5	15	15	17	15.1	14.8
Manchester Sharston	384202	386121	Suburban	97.1	97.1	11.9	12	13	10.8	10.7
Oldham Crompton Way	393884	409183	Roadside	98.3	98.3	15	17	18	14.9	14.4
Rochdale Queensway	389325	411411	Roadside	92.0	92.0	-	15.5	18	16.1	14.5
Salford Eccles	377926	398727	Urban Background	100.0	99.6	14	15	17	15.1	15.6
Salford Glazebury	368759	396027	Rural	100.0	98.8	-	-	12.7	10.7	10.3
Salford M60	374811	400857	Roadside	98.9	98.9	19	20	20	18.5	16.8
Stockport Cheadle A34	385047	388339	Roadside	96.9	96.1	15	16	16	13.5	12.3
Stockport Hazel Grove	391481	387637	Roadside	99.4	99.4	18	18	20	17.1	15.9
Tameside A635 Manchester Road	392538	398419	Roadside	91.5	91.5	15.8	20	20	16.7	16.2

Tameside Mottram Moor	399719	395804	Roadside	91.8	91.8	17	15	15	11.3	13.5
Trafford A56	379411	394014	Roadside	94.7	94.7	14	14	16	12.9	12.8
Trafford Moss Park	378783	394728	Urban Background	97.7	73.0	13	13	17	11.1	11.2
Wigan Centre	357816	406024	Urban Background	100.0	98.1	13	13	15	12.5	12.0
Wigan Leigh 3	365686	400243	Roadside	96.2	96.2	16.3	18	19	15.5	15.5

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.**

Notes:

The annual mean concentrations are presented as $\mu\text{g}/\text{m}^3$.

Exceedances of the PM_{10} annual mean objective of $40 \mu\text{g}/\text{m}^3$ are shown in **bold**.

All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

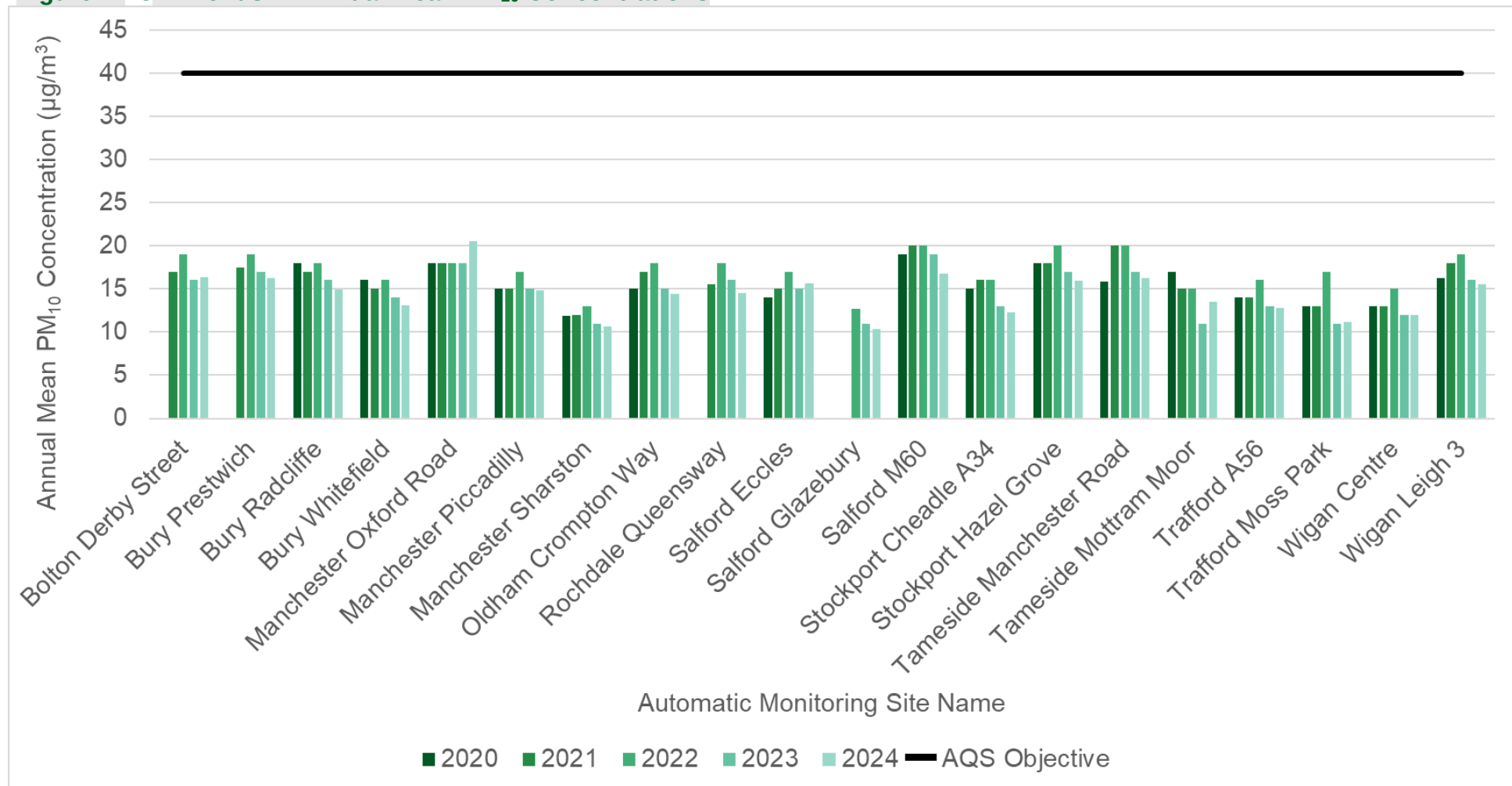
Figure A.13 – Trends in Annual Mean PM₁₀ Concentrations

Table A.7 – 24-Hour Mean PM₁₀ Monitoring Results, Number of PM₁₀ 24-Hour Means > 50 µg/m³

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Bolton A579 Derby Street	371296	408600	Roadside	75.7	75.7	1(22)	2	7	1	0 (32)
Bury Prestwich	381650	403222	Roadside	98.7	98.7	0(25)	1(27)	6	2	1
Bury Radcliffe	378190	407480	Roadside	98.6	98.6	3	1(23)	7	1	0
Bury Whitefield	380636	406973	Roadside	97.4	97.4	0	0	5	1	0
Manchester Oxford Road	384239	397276	Kerbside	81.1	81.1	5	2	8	4	1 (36)
Manchester Piccadilly	384310	398337	Urban Centre	100.0	78.5	1	2	4	1	0 (26)
Manchester Sharston	384202	386121	Suburban	97.1	97.1	-	-	1	0	0
Oldham Crompton Way	393884	409183	Roadside	98.3	98.3	0	0	1	1	0
Rochdale Queensway	389325	411411	Roadside	92.0	92.0	-	0	6	1	1
Salford Eccles	377926	398727	Urban Background	100.0	99.6	0	1	7	2	3
Salford Glazebury	368759	396027	Rural	100.0	98.8	-	-	0(18)	0	0
Salford M60	374811	400857	Roadside	98.9	98.9	0	2	8	5	0
Stockport Cheadle A34	385047	388339	Roadside	96.9	96.1	0	1	1	0	0
Stockport Hazel Grove	391481	387637	Roadside	99.4	99.4	0	1	7	2	0
Tameside A635 Manchester Road	392538	398419	Roadside	91.5	91.5	1(25)	2	7	2	0

Tameside Mottram Moor	399719	395804	Roadside	91.8	91.8	0	1	1	0	0
Trafford A56	379411	394014	Roadside	94.7	94.7	1	0	4	0	0
Trafford Moss Park	378783	394728	Urban Background	97.7	73.0	0	0	4	0	0 (21)
Wigan Centre	357816	406024	Urban Background	100.0	98.1	1	1	6	0	0
Wigan Leigh 3	365686	400243	Roadside	96.2	96.2	2(24)	1	7	0	0

Notes:

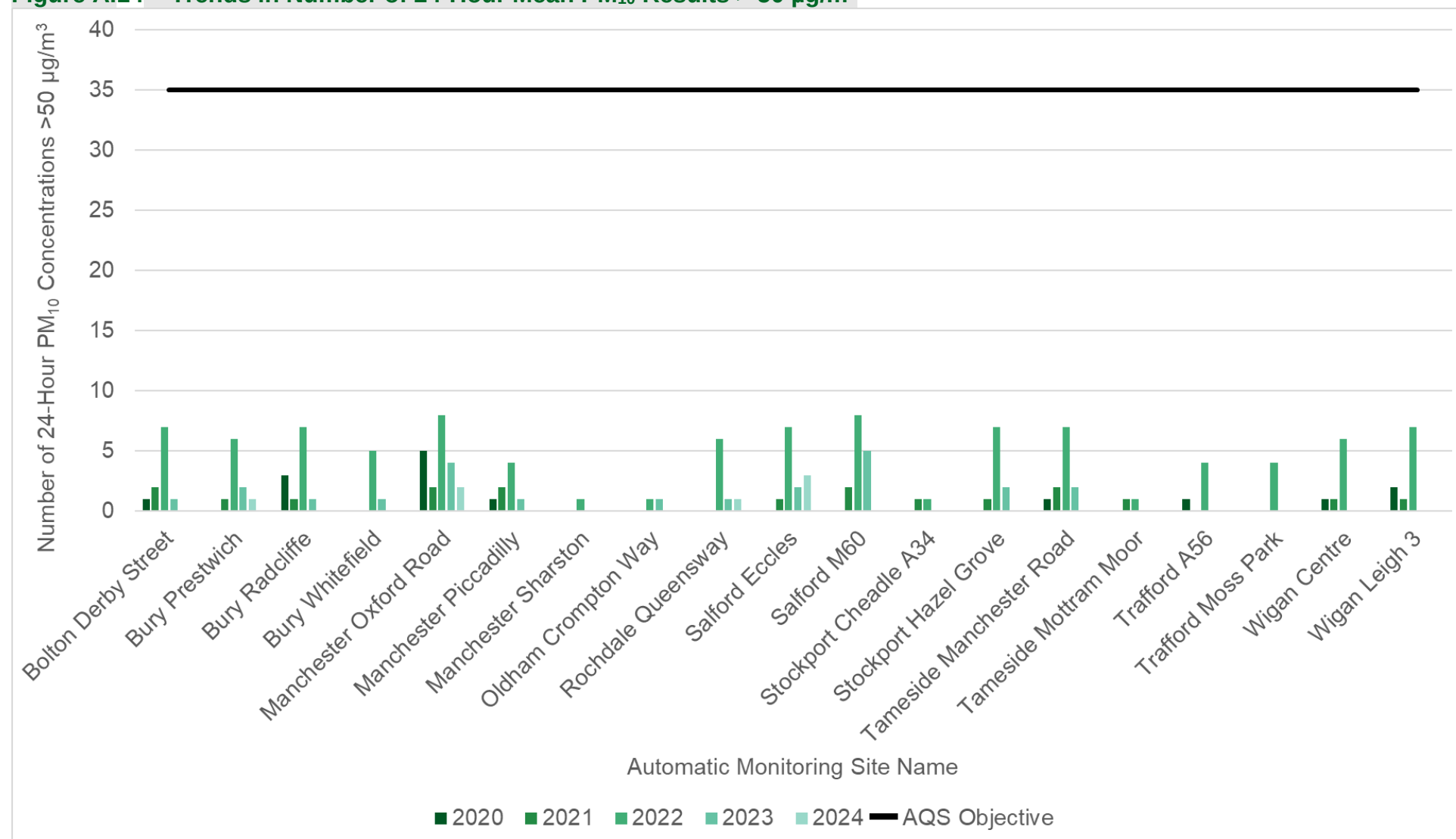
Results are presented as the number of 24-hour periods where daily mean concentrations greater than 50 µg/m³ have been recorded.

Exceedances of the PM₁₀ 24-hour mean objective (50 µg/m³ not to be exceeded more than 35 times/year) are shown in **bold**.

If the period of valid data is less than 85%, the 90.4th percentile of 24-hour means is provided in brackets.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A.14 – Trends in Number of 24-Hour Mean PM₁₀ Results > 50 µg/m³

Only sites which recorded a 24-hour concentration above 50 µg/m³ between 2020 and 2024 have been included in this chart. None were recorded for Salford Glazebury between 2020 and 2024.

Table A.8 – Annual Mean PM_{2.5} Monitoring Results (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2020	2021	2022	2023	2024
Bolton A579 Derby Street	371296	408600	Roadside	97.1	97.1	-	10	11	8.4	7.3
Manchester Piccadilly	384310	398337	Urban Centre	100.0	78.5	8	9	10	8.5	8.5
Manchester Sharston	384202	386121	Suburban	97.1	97.1	-	6.3	7	6.4	6.5
Rochdale Queensway	389325	411411	Roadside	94.8	94.8	-	9.2	10	8.9	8.3
Salford Eccles	377926	398727	Urban Background	100.0	99.6	8	9	10	8.6	9.1
Salford Glazebury	368759	396027	Rural	100.0	98.8	-	-	7.6	6.5	6.4
Salford M60	374811	400857	Roadside	99.5	99.5	10	10	11	8.8	7.6
Tameside A635 Manchester Road	392538	398419	Roadside	83.4	81.9	8.4	11	11	7.6	7.8
Wigan Centre	357816	406024	Urban Background	100.0	98.1	8	8	9	7.5	7.5
Wigan Leigh 3	365686	400243	Roadside	92.6	92.6	7.8	9	11	8.2	8.6

☒ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

Notes:

The annual mean concentrations are presented as µg/m³.

All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

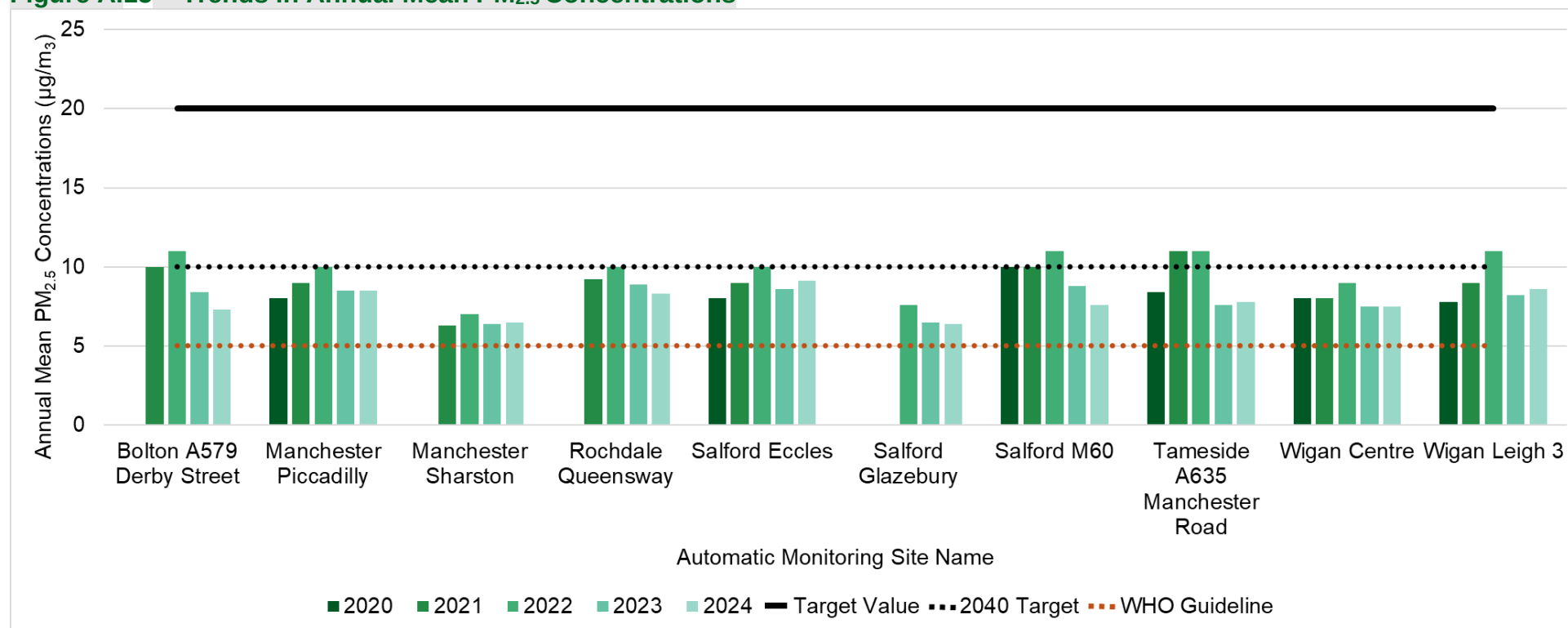
Figure A.15 – Trends in Annual Mean PM_{2.5} Concentrations

Table A.9 – SO₂ 2024 Monitoring Results, Number of Relevant Instances

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	Number of 15-minute Means > 266 µg/m ³	Number of 1-hour Means > 350 µg/m ³	Number of 24-hour Means > 125 µg/m ³
Manchester Piccadilly	384310	398337	Urban Centre	88.3	88.3	11	2	0
Manchester Sharston	384202	386121	Suburban	98.6	98.6	10	2	0

Notes:

Results are presented as the number of instances where monitored concentrations are greater than the objective concentration. Exceedances of the SO₂ objectives are shown in **bold** (15-min mean = 35 allowed a year, 1-hour mean = 24 allowed a year, 24-hour mean = 3 allowed a year).

If the period of valid data is less than 85%, the relevant percentiles are provided in brackets.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Appendix B: Full Monthly Diffusion Tube Results for 2024

Table B.1 – NO₂ 2024 Diffusion Tube Results (µg/m³)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.82)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
Bolton Metropolitan Borough Council																		
BO3NO	370763	407929	57.7						37.4				50.7	41.6	46.9	31.1	-	
BO4NO	371394	411718	26.6					11.9	14.5				31.9	24.7	21.9	15.9	-	
BO8NO	371352	409094	32.2					12.5	14.3				32.3	24.7	23.2	16.8	-	
BO11NO	363712	412396	23.2					5.6	6.6				14.8	12.6	12.6	9.1	-	
BO14NO	373839	406130	27.5					12.1	14.3				28.9	26.3	21.8	15.8	-	
BO15NO	371435	411690	31.2					16.9	19.7				34.1	37.0	27.8	20.2	-	
BO16NO	371304	411748	23.5					9.4	9.4				26.8	22.3	18.3	13.3	-	
BO41NO	366286	406561	39.0					24.0	24.3				39.4	33.2	32.0	23.2	-	
BO43NO	365501	409887	33.3					21.6	31.0				36.1	31.6	30.7	22.3	-	
BO44NO	365599	409845	26.0					14.2	14.7				24.8	24.3	-	-	-	Duplicate Site with BO44NO and BO45NO - Annual data provided for BO45NO only
BO45NO	365599	409845	24.9					16.2	15.2				26.6	23.7	21.1	15.3	-	Duplicate Site with BO44NO and BO45NO - Annual data provided for BO45NO only
BO48NO	375397	407457	29.7					14.9	18.1				29.7	29.5	24.4	17.7	-	
BO53NO	373236	411968	40.0					30.7	27.6				40.7	34.0	34.6	25.1	-	
BO54NO	372908	412120	17.6					7.7	8.2				19.6	17.4	14.1	10.2	-	
BO60NO	373287	405061	33.7					19.7	19.7					21.3	23.6	19.0	-	
BO61NO	374450	405207	42.9					30.8	31.4				38.1	35.6	35.8	26.0	-	
BO62NO	374194	405460	40.4					26.0	27.3				40.6	36.8	34.2	24.9	-	
BO63NO	374282	406257	26.5					13.4					27.8	25.8	23.4	15.8	-	
BO64NO	371965	409907	31.6					16.1	16.3				34.2	31.1	25.9	18.8	-	

BO65NO	372059	409877	30.6					18.3	18.1				33.4	29.4	26.0	18.9	-	
BO66NO	371442	411599	38.9					27.0	0.9				44.6	28.8	28.0	20.4	-	
BO67NO	365163	405640	24.0					9.3	11.0				26.3		17.7	12.9	-	
BO68NO	367672	406910	30.8					21.8	21.6				31.1	50.2	31.1	22.6	-	
BO69NO	369030	405809							37.8				50.1	42.7	43.5	30.6	-	
BO70NO	368757	405701	26.7					10.1	12.3				19.0	24.3	18.5	13.4	-	
BO71NO	370362	405400	52.9					39.0	35.3				45.4	44.8	43.5	31.6	-	
BO72NO	370115	405372	33.7					17.0	18.1				38.1	31.7	27.7	20.1	-	
BO73NO	371805	409820	39.1					24.0	32.7					39.2	33.8	27.2	-	
BO74NO	371805	409832	48.5					38.2	27.7				45.1	37.6	39.4	28.6	-	
BO75NO	371623	409235						13.1						28.6	-	-	-	Insufficient data capture for annualisation
BO76NO	373491	404836						19.4	20.0				35.7	33.1	-	-	-	Triplicate Site with BO76NO, BO77NO and BO78NO - Annual data provided for BO78NO only
BO77NO	373491	404836						18.1	20.4				36.2		-	-	-	Triplicate Site with BO76NO, BO77NO and BO78NO - Annual data provided for BO78NO only
BO78NO	373491	404836						21.1	21.7				37.1	33.4	27.5	21.5	-	Triplicate Site with BO76NO, BO77NO and BO78NO - Annual data provided for BO78NO only
BO79NO	371296	408600	45.6					14.4	18.0				36.0	32.5	-	-	-	Triplicate Site with BO79NO, BO80NO and BO81NO - Annual data provided for BO81NO only
BO80NO	371296	408600						13.6	18.2				35.4	30.1	-	-	-	Triplicate Site with BO79NO, BO80NO and BO81NO - Annual data provided for BO81NO only
BO81NO	371296	408600	38.8					13.2	16.6				36.1	32.5	28.2	20.5	-	Triplicate Site with BO79NO, BO80NO and BO81NO - Annual data provided for BO81NO only
BOA101	374561	405364	35.0					21.9	21.7				36.0	41.7	31.3	22.7	-	
BOA102	374584	405525	36.1						24.6				31.4	34.1	31.6	20.9	-	
BOA103	374526	405906	31.0					15.3	15.6				33.8	28.3	24.8	18.0	-	
BOA104	373795	406600						15.5	17.1				32.4	28.4	23.4	18.3	-	
BOA105	373604	406882	34.7					24.3	18.8				36.9	32.8	29.5	21.4	-	

BOA107	372372	408912	31.0					15.1	15.7				30.5	31.8	24.8	18.0	-	
BOA106	372643	408070	38.8					26.5	23.3				38.9	36.6	32.8	23.8	-	
BOA109	373818	409401	28.4					13.9	13.2				26.8	27.3	21.9	15.9	-	
BOA110	371501	409694	39.7					21.5	23.9				34.5	49.2	33.8	24.5	-	
BOA111	371102	409575	36.1					25.3	24.9				36.0	46.2	33.7	24.5	-	
BOA112	371715	408681	46.1					23.8	24.1				40.5	43.2	35.5	25.8	-	
BOA113	374510	405522	33.5					20.1					37.5	33.7	31.2	21.0	-	
BOA114	372122	409347	37.2					16.8	19.0				38.1	30.3	28.3	20.5	-	
BOA115	371903	409026	47.2					27.7	28.8				48.5	37.7	38.0	27.6	-	
BOA116	371803	408976	41.5					22.5	27.4				41.2		33.2	24.3	-	
BOA118	371832	409625	32.3					18.2	17.6				36.5	34.2	27.8	20.2	-	
BOA119	371328	409251						17.7	22.7				72.1	35.4	37.0	29.0	-	
BOA120	373946	405207						14.1	13.4				31.7	33.8	23.3	18.2	-	
Bury Metropolitan Borough Council																		
BU1NO	384372	404917	33.7	33.3	18.9	23.7	23.4	21.7		22.9	21.1	31.8	36.4		26.7	21.9	-	
BU2NO	379101	417145	35.0	38.9	33.1	31.8	35.3	29.8	31.0		32.3	28.7	36.8		33.3	27.3	-	
BU3ANO	380636	406973	28.3	26.0	19.8	16.2	16.6	13.8	18.7	18.2	18.8	16.7	25.0		-	-	-	Triplicate Site with BU3ANO, BU3BNO and BU3CNO - Annual data provided for BU3CNO only
BU3BNO	380636	406973	28.5	30.1	19.7	16.9	16.8	14.8	17.3	16.6	19.6	24.1	23.9		-	-	-	Triplicate Site with BU3ANO, BU3BNO and BU3CNO - Annual data provided for BU3CNO only
BU3CNO	380636	406973	27.1	25.3	20.4	17.2	17.1	14.5	17.1	16.8	19.7	22.8	28.0		20.4	16.7	-	Triplicate Site with BU3ANO, BU3BNO and BU3CNO - Annual data provided for BU3CNO only
BU4NO	380964	404831	40.5	42.1	35.5	27.4	28.3		26.1			53.7	37.2		36.4	27.4	-	
BU5NO	380497	405420	28.4	29.6	21.6	17.2	18.2	15.5	17.7	16.6	17.6	24.9	28.7		21.5	17.6	-	
BU6NO	379658	410888	38.2	39.4	30.1	3.9	31.6	22.5	24.4	26.4	33.6	35.1	31.0		28.7	23.6	-	
BU7NO	381984	411866	34.8	32.7	25.2	22.6	19.9	24.1	23.9	24.5	22.1	32.2			26.2	21.5	-	

BU8NO	380754	412619	34.3	36.0	31.1	25.0	25.3	17.5	20.8	21.5	29.3	33.3	37.3		28.3	23.2	-	
BU9NO	379630	411031	38.5	32.7	28.0	21.6	22.4	22.0	22.0	25.1	25.8	36.0	31.9		27.8	22.8	-	
BU10NO	379854	410978		37.1	31.1	21.0				40.3	37.9	42.3	32.8		34.6	27.6	-	
BU11NO	380980	411193	40.7	43.0	38.3	28.0	31.5	23.4	26.9	31.2	29.6	40.5	38.3		33.8	27.7	-	
BU12NO	381344	410744	47.6	46.0	40.3	41.1	46.2	39.8	40.1	44.6	46.1	51.3	45.8		44.4	36.4	30.5	
BU13NO	381728	410677	48.0	44.4	44.4	34.0	42.8	35.1	37.3	43.7			43.4		41.5	34.0	-	
BU14NO	380398	410455		41.6	32.2	28.0	29.5	24.0	24.4	32.6	31.9	32.0	37.9		31.4	25.8	-	
BU15NO	380852	405209	55.1	51.1	39.4	37.1	35.9	34.2	36.6	36.7	37.3	37.9	46.7		40.7	33.4	-	
BU16NO	380914	404898	49.1	44.7	39.2	35.5	35.5	29.0	36.6	33.2	34.3	43.1	44.9		38.6	31.7	-	
BU17NO	381105	404279	39.2	37.7	26.5	24.1	25.6	23.8	25.2		25.5	32.0	37.0		29.7	24.3	-	
BU18NO	382071	411362	38.7	36.9		29.7	30.3	20.5	23.8	26.0	36.9	36.3	33.9		31.3	25.7	-	
BU19NO	381321	405115	37.6	47.2	45.2	33.0	33.2	24.6	32.0	33.7	29.0	40.2	35.0		35.5	29.1	-	
BU20NO	382974	405930	40.5	33.3	24.5	24.6	27.8	30.1	27.0		23.7	29.1	33.7		29.4	24.1	-	
Manchester City Council																		
MA9ANO	384601	398303	45.6	47.8	40.4	36.7		33.7	37.7	36.3	37.3	44.8	50.5	43.2	41.3	33.8	-	
MA24NO	383968	398070	33.7	39.6	31.3	27.9	28.1	30.2	30.9	28.5	34.5	36.1	43.8	33.8	33.2	27.2	-	
MA26ANO	383973	398874	38.9	34.9	27.8	22.7		20.4	22.3	21.2	30.4	32.4	44.4	34.8	30.0	24.6	-	
MA29ANO	384119	397503	63.1	78.2	70.4	50.8		63.1	47.9	50.4	69.9	72.8	69.1	52.3	62.5	51.3	46.8	
MA37NO	382829	391493	36.8	41.6	30.3	31.1	31.9	33.4	30.6	28.1	35.9	30.6	43.1	45.0	34.9	28.6	-	
MA59NO	384310	398337	32.2	34.9	30.7	24.3	25.3	19.3	21.7	25.5	28.2	42.7	64.1	27.4	-	-	-	Triplicate Site with MA59NO, MA60NO and MA61NO - Annual data provided for MA61NO only
MA60NO	384310	398337	34.7	30.3	31.3	23.3	22.2	19.8	22.2	20.9	29.3	31.3	42.6	30.4	-	-	-	Triplicate Site with MA59NO, MA60NO and MA61NO - Annual data provided for MA61NO only
MA61NO	384310	398337	33.5	33.3	29.4	21.6	24.0	20.7	22.3	23.9	29.2	34.6	53.3	31.8	29.8	24.4	-	Triplicate Site with MA59NO, MA60NO and MA61NO - Annual data provided for MA61NO only
MA71NO	385161	398290	42.3	37.2	33.1	28.4	31.5	33.3	31.0	32.8	30.0	39.5	44.8	39.8	35.3	29.0	-	

MA72NO	384761	397384	38.0	35.8	26.9	23.6	24.5	23.1	25.2	19.9	31.7	31.1	38.3	33.8	29.3	24.0	-	
MA73NO	388604	396042	39.8	37.9	34.1	26.7	39.0	25.5	26.8	24.4	40.8	37.8	45.5	31.4	34.1	28.0	-	
MA75NO	387363	394617	47.4	48.8	47.5	39.8	49.0	36.6	37.7	36.1	50.4	47.8	57.7	45.3	45.3	37.2	29.5	
MA77NO	383576	397489	38.3	40.5	36.9	26.6	31.0	28.4	28.9	29.3	39.3	35.7	45.9	35.2	34.7	28.4	-	
MA81NO	386589	394083	27.0	24.8	18.8	14.0	15.6	16.2	15.9	16.1	17.8	21.1	27.7	22.9	19.8	16.3	-	
MA82NO	384239	397276	53.7	64.9	49.7	41.8	49.0	47.0	45.5	39.9	56.2	53.3	60.7	49.7	-	-	-	Triplicate Site with MA82NO, MA83NO and MA84NO - Annual data provided for MA84NO only
MA83NO	384239	397276		49.2	53.0	44.9	45.5	48.2	44.3	39.3	54.4	56.1	65.4	49.4	-	-	-	Triplicate Site with MA82NO, MA83NO and MA84NO - Annual data provided for MA84NO only
MA84NO	384239	397276	58.0	63.6	51.9	41.1	46.1	45.2	46.3	41.6	52.2	54.2	64.9	47.8	50.8	41.7	35.4	Triplicate Site with MA82NO, MA83NO and MA84NO - Annual data provided for MA84NO only
MA88NO	384469	398981	42.4	42.4	36.9	32.3	37.4	28.2	34.4	31.8	42.1	37.3	46.5	31.3	36.9	30.3	-	
MA88ANO	386536	396699	46.8	54.8	38.5	30.7	35.7	28.2	31.2	32.8	35.9	41.5	51.4	39.7	38.9	31.9	-	
MA90BNO	384202	386121	24.5	20.4	15.2	11.4	12.7	15.1	13.6	12.6	14.4	16.3	23.5	20.5	-	-	-	Triplicate Site with MA90BNO, MA91BNO and MA92BNO - Annual data provided for MA92BNO only
MA91BNO	384202	386121	24.1	22.4	15.3	12.0	13.7	14.0	13.2	13.3	14.6	15.3	23.3	20.6	-	-	-	Triplicate Site with MA90BNO, MA91BNO and MA92BNO - Annual data provided for MA92BNO only
MA92BNO	384202	386121	24.3	21.5	18.2	13.0	14.3	14.1	13.4	12.6	16.4	13.9	23.9	21.0	16.9	13.9	-	Triplicate Site with MA90BNO, MA91BNO and MA92BNO - Annual data provided for MA92BNO only
MA93BNO	382419	390010	44.1	41.2	36.4	34.3	26.4	35.2	36.6	35.0	37.9	37.6	45.3	35.0	37.1	30.4	-	
MA95BNO	386668	397566	33.8	41.2	29.6	28.9	30.6	28.5	28.4		31.3		41.9	39.0	33.3	27.3	-	
MA96BNO	385189	397167	52.8	54.4	43.8	38.8	42.9	33.6	38.0	31.5	47.9	49.4	55.9	43.1	44.3	36.4	34.4	
MA99BNO	385400	399245	44.3	42.6	33.8	27.5	28.5	22.9		25.6	29.7	35.1	41.9	37.6	33.6	27.5	-	
MA100BN O	383605	402293		41.9	34.1		30.1	24.9	28.3		28.9	34.9	41.7	33.2	33.1	27.2	-	
MA101BN O	385999	402026	47.5	48.7	40.0	25.6	36.9	32.4	34.2	31.4	36.2	42.8	53.7	40.0	39.1	32.1	-	
MA102BN O	385792	402952	44.5	38.4	31.5	27.5	32.4	31.4	31.0	27.8	32.7	36.1	35.9	35.3	33.7	27.6	-	
MA103BN O	385431	400653	49.5	47.5	42.5	38.4	42.9	38.2	38.3	37.4	41.5	45.0	53.4	43.1	43.1	35.4	-	

MA104BN O	383511	399906	46.1	44.3	39.5	31.3	33.2	29.6	31.6	32.5	34.3	46.9	47.4	38.5	37.9	31.1	-	
MA112BN O	383987	396735	31.0	28.3	22.6	15.7	19.1	23.8	16.9	16.6	24.9	20.8	35.6	27.0	23.5	19.3	-	
MA113BN O	385087	396891	42.2	40.0	31.5	23.1	30.4		26.8	22.2	33.5	36.4	45.6	38.3	33.6	27.6	-	
Oldham Metropolitan Borough Council																		
OLMRNO	390746	405397	32.0	40.2	30.6	23.8	24.0	23.7	24.3	22.9	21.7	29.1	38.8	11.8	26.9	22.1	-	
OLSHSNO	390394	405454	29.1	36.7	32.8	27.9	29.0	20.1	28.9	25.4	34.6	33.8	43.9	36.2	31.5	25.9	-	
OL259BNO	390089	404456	43.0	45.6	37.0	32.3	35.0	32.2	33.5	29.5	39.1	38.4	48.3	42.3	38.0	31.2	-	
OL1RANO	388698	404903	34.7	35.6	26.9	20.4	22.1	17.8	21.6	21.2	21.8	28.2	37.8	31.9	26.7	21.9	-	
OL484BNO	389367	403280	36.4	35.7	32.4	25.5	24.9	19.9	24.2	21.9	33.6	32.5	41.1	41.1	30.8	25.2	-	
OLOBNO	389789	403685		39.3							26.6	25.2	37.1	35.1	32.7	22.3	-	
OLPSNO	388747	400973	41.9	39.0	27.1	29.6	26.2	29.2	27.2	24.4	29.4	27.9	41.3	38.5	31.8	26.1	-	
OLWARNO	389237	401310	45.9	49.6	34.9	26.7	27.6	23.1	27.3	23.5	27.5	37.0	44.8	40.9	34.1	27.9	-	
OLHRNO	390756	402571		46.7	29.2	29.5	29.3	33.2	33.0	30.4	25.5	34.6	43.2	42.1	34.2	28.1	-	
OLIRSNO	390675	402736	31.1	36.2	26.1	25.5	22.6	26.8	24.6	24.9	23.9	29.3	38.3	33.5	28.6	23.4	-	
OL368MRN O	390976	403252	51.1	49.7	40.7	35.9	33.9	27.6	34.0	29.3	37.6	43.9	51.2	48.4	40.3	33.0	-	
OLESNO	391367	404318	37.1	37.1	31.6	23.5	26.6	23.2	25.0	23.7	29.8	36.9	40.3	34.9	30.8	25.3	-	
OLARNO	392771	402951	32.5	29.7	24.9	19.5	22.1	21.5	22.1	18.9	21.8	28.1	34.8	57.3	27.8	22.8	-	
OLWOODN O	393056	404638	30.0	54.0	24.7	22.2	24.8	25.4	29.1	27.3	25.5	29.1	36.2	47.2	31.3	25.7	-	
OLWSMSN O	392947	404854	33.5	36.2	27.5	23.1	23.2	24.7	27.4	25.1	26.1	34.3	43.2	38.6	30.2	24.8	-	
OL17SRN O	393643	405343	48.3	53.8	43.1	33.4	38.6	33.0	40.2	31.9	39.2	51.5	55.5	43.2	42.6	35.0	-	
OLHS2NO	393501	405186	34.6	38.6	27.3	24.6	23.4	22.0	22.0	21.8	25.6	27.2	33.3	39.3	28.3	23.2	-	
OLRRNO	394210	405752	36.4	35.7	23.9	22.8	28.1	27.2	28.5	25.0	26.9	31.1	39.9	34.7	30.0	24.6	-	
OLHURNO	395561	405751	35.9	36.0	25.7	27.5	28.6	27.2	27.4	22.5	29.2	30.3	32.6	33.9	29.7	24.4	-	

OLCVNO	399533	404454	19.5	18.4	14.0	11.4	14.2	13.0	14.1	12.4	17.0	18.5	21.9	20.5	16.2	13.3	-	
OLHSNO	399589	405511	32.4	35.9	25.8	21.9	21.7	20.9	22.6	21.8	20.7	27.0	29.9	27.0	25.6	21.0	-	
OLCW1NO	393884	409183	30.6	32.3	21.3	21.9	24.3	25.0	24.6		56.9	24.5	36.1	31.4	-	-	-	Triplicate Site with OLCW1NO, OLCW2NO and OLCW3NO - Annual data provided for OLCW3NO only
OLCW2NO	393884	409183	32.4	31.6	22.2	22.3	24.7	24.7		23.8	21.4	23.8	33.5	30.3	-	-	-	Triplicate Site with OLCW1NO, OLCW2NO and OLCW3NO - Annual data provided for OLCW3NO only
OLCW3NO	393884	409183	33.0	31.7	22.5	20.6	24.9	24.9	26.5		24.0	25.1	32.2	30.5	27.5	22.5	-	Triplicate Site with OLCW1NO, OLCW2NO and OLCW3NO - Annual data provided for OLCW3NO only
OL21SRNO	392217	407255	57.6	63.0	43.3	46.6	45.4	47.0	49.5	47.3	43.3	46.8	50.7	64.5	50.4	41.3	39.9	
OLJSNO	393097	406897	32.5	32.6	24.4	18.7	18.4	16.0	18.5	16.5	21.9	27.5	29.1	29.9	23.8	19.5	-	
OLRDNO	392111	406432	37.4	37.6	30.8	25.2	24.4	22.7	25.7	23.7	25.3	28.9	43.1	37.3	30.2	24.7	-	
OL12ORNNO	392045	407608	56.4	59.1	42.1	34.0	37.2	47.6	46.8	39.7	35.8	42.6	55.5	50.7	45.6	37.4	-	
OLFANO	391100	406218	25.8	26.5					15.2	15.6	16.3	22.7	27.8	27.5	22.2	16.4	-	
OLSMWNO	392748	405294						22.2	20.0	19.2	16.7	22.9	34.4		22.6	19.8	-	
OLLSNO	392646	405286						24.2	26.5	24.1	18.8	33.1	30.8	31.6	27.0	22.8	-	
OLSWNO	392622	405289						22.2	23.8	22.7	23.4	33.6	38.2	32.2	28.0	23.6	-	
Rochdale Metropolitan Borough Council																		
RO2ANO	388537	409942	31.8	35.7	31.9	24.3		23.0	27.4	32.6		33.1	34.6	24.9	29.9	24.5	-	
RO3ANO	388581	409797	23.6		16.7		16.2	13.5	13.6	11.1	15.3	14.9			15.6	14.4	-	
RO4ANO	387080	406278	31.2	31.7	25.7	18.4	20.6	17.0							24.1	20.3	-	
RO5ANO	386870	404044	24.8	26.1	19.2	14.2	14.0	14.7	14.7	13.9	12.7	20.7	23.5	21.8	18.4	15.1	-	
RO6ANO	385413	408320	36.7	35.5	30.7	34.4	24.1	18.1	25.0	22.4	25.1	33.5	41.5	28.9	29.7	24.3	-	
RO7ANO	388603	411925	36.2	37.9	34.3	20.0	25.4	17.4	20.9	21.3	24.4	35.2		30.6	27.6	22.6	-	
RO8ANO	388932	412091													-	-	-	
RO9ANO	389057	412217													-	-	-	

RO10ANO	388800	413603						9.1	10.9	11.4		17.6	20.6	19.7	14.9	12.3	-	
RO12ANO	392072	415687													-	-	-	
RO13ANO	392042	415707	44.9	39.4	34.3	27.9	30.8	26.2	36.5	19.1	25.8	34.4	41.2	37.0	33.1	27.2	-	
RO14ANO	393665	417816	15.4	16.4	10.6	8.7		6.8	7.0	9.0	7.0	12.4	18.3	14.0	11.4	9.4	-	
RO15ANO	392976	411906											34.4		-	-	-	Insufficient data capture for annualisation
RO16ANO	392542	411709	22.9	23.9	20.5	14.9	17.7	12.9	13.7	14.7	14.0	21.7	24.4	20.3	18.5	15.1	-	
RO17ANO	391214	412609	24.5	26.8	16.3	13.8	12.4	14.3	14.3	13.8	9.6	18.6	25.0	23.4	17.7	14.5	-	
RO18ANO	389877	413590	28.2	20.2	17.9	13.8	13.9	11.7	12.1	13.4	15.6	22.7	28.2	26.3	18.7	15.3	-	
RO20ANO	385748	408931	40.5	44.3	36.5	30.3	37.5	32.8	26.5		30.8	41.1	46.2	39.1	36.9	30.2	-	
RO21ANO	385820	410776	39.2	38.6	33.2	23.7	28.6	27.5	27.9	28.0	23.6	33.2	43.6	37.1	32.0	26.3	-	
RO22ANO	390464	411976	42.7	36.2	30.9	27.4		23.0	27.5	26.7	31.0	30.3	40.9	38.4	32.3	26.5	-	
RO23ANO	390377	412030	46.7	41.3		28.2	27.5	23.1	23.9	21.8	28.7	33.3	43.6	32.5	31.9	26.1	-	
RO24ANO	388089	410822	33.7	31.9	24.8	19.1	20.5	19.9	19.3	20.7	20.1	27.5	35.4	22.1	24.6	20.2	-	
RO25ANO	387792	406013				24.5							40.8	37.1	-	-	-	Insufficient data capture for reliability
RO26ANO	389782	414241											47.9	37.4	-	-	-	Insufficient data capture for annualisation
RO27ANO	390710	414563	45.6	42.2	39.4	29.8	35.8		22.9	27.1	32.1	36.0	45.0	25.4	34.7	28.4	-	
RO28ANO	392871	415127	33.5	30.5	23.7	20.4	22.8	20.7	20.0	18.7	21.1	31.0	34.7	33.8	25.9	21.2	-	
RO29ANO	389325	411411	39.1	32.9	30.6	27.8	29.3	29.5	30.8	29.3	30.1	33.2	42.5	33.2	-	-	-	Triplicate Site with RO29ANO, RO30ANO and RO31ANO - Annual data provided for RO31ANO only
RO30ANO	389325	411411				28.0	29.8	29.9	27.6	28.6	27.1	34.4	42.0	35.2	-	-	-	Triplicate Site with RO29ANO, RO30ANO and RO31ANO - Annual data provided for RO31ANO only
RO31ANO	389325	411411			31.4	28.1	30.0	30.2	27.5	28.8	28.8	34.6	42.3	35.1	32.3	26.5	-	Triplicate Site with RO29ANO, RO30ANO and RO31ANO - Annual data provided for RO31ANO only
RO32ANO	385145	407701													-	-	-	

Salford City Council

SA1NO	372767	394104	18.9	18.7	11.7	11.0	11.6	7.6	11.3	12.8	16.7	18.3	24.7	19.7	15.3	12.5	-	
SA2NO	372140	394210	16.2	20.4	15.6	12.1	13.5	11.8	12.0	13.1	15.0	16.2	24.1	18.4	15.7	12.9	-	
SA4NO	377453	401830	25.3	24.8	20.5	16.0	18.6	11.8	14.7	15.3	21.5	22.3	32.7	24.1	20.6	16.9	-	
SA9NO	374741	400937	26.5	24.6	23.2	17.1	17.2	12.5	15.5	18.0	17.8	22.7	28.6	21.3	20.4	16.7	-	
SA13NO	379613	399784	24.9	22.6	17.5	11.4	13.0			12.8	15.7	20.3	28.8	21.0	18.8	15.4	-	
SA16NO	371187	404453	27.6	28.3	21.8	17.8	15.2	13.6	15.7	18.4	17.0	23.7	29.6	22.0	20.9	17.1	-	
SA20NO	374811	400857	42.1	43.0	43.2	39.8	35.5	27.6	30.6	35.8	34.8	39.3	33.2	35.6	-	-	-	Triplicate Site with SA20NO, SA21NO and SA22NO - Annual data provided for SA22NO only
SA21NO	374811	400857	43.1	43.7	43.5	32.8	37.5	26.8	32.8	37.4	33.7	42.2	38.8	40.0	-	-	-	Triplicate Site with SA20NO, SA21NO and SA22NO - Annual data provided for SA22NO only
SA22NO	374811	400857	39.9	30.4	44.9	35.2	33.2	28.2	29.9	36.2	33.7	41.1	40.2	38.1	36.8	30.2	-	Triplicate Site with SA20NO, SA21NO and SA22NO - Annual data provided for SA22NO only
SA23NO	377926	398727	27.0	24.7	19.5	15.5	17.3	11.9	14.2	14.6	23.3	20.7	30.0	23.3	-	-	-	Triplicate Site with SA23NO, SA24NO and SA29NO - Annual data provided for SA29NO only
SA24NO	377926	398727	28.5	24.5	19.8	15.2	17.3	12.7	14.5	14.5	22.5	21.9	30.0	23.5	-	-	-	Triplicate Site with SA23NO, SA24NO and SA29NO - Annual data provided for SA29NO only
SA29NO	377926	398727	20.4	25.3	19.6	15.1	17.4	12.5	15.0	14.5	23.5	22.0	28.3	23.5	20.1	16.5	-	Triplicate Site with SA23NO, SA24NO and SA29NO - Annual data provided for SA29NO only
SA25NO	381304	398014	33.1	29.0	24.4	17.5	22.2	15.4	17.7	16.8	27.3	23.7	32.6	29.0	24.1	19.7	-	
SA26NO	380718	399597	34.5	30.4	25.4	17.8	25.4	20.6	21.5	21.2	32.7	29.0	36.9	29.4	27.1	22.2	-	
SA27NO	383078	398741	34.2	39.4	29.8	24.1	24.9	22.8	23.1	24.6	27.9	31.1	37.5	32.4	29.3	24.0	-	
SA31NO	374025	401905	30.3	30.7	25.0	18.9	21.2	16.7	18.2	19.5	23.8	25.7		28.4	23.5	19.3	-	
SA34NO	375367	397800	43.8	38.9	32.7	32.7	29.9	35.4	32.8	29.8	33.4	30.9	41.9	34.9	34.8	28.5	-	
SA38NO	377796	403065	26.8	28.2	20.1	14.6	19.3	15.2	16.2	15.9	22.4	21.7	33.5	29.4	21.9	18.0	-	
SA51NO	375213	397661	31.8	31.6	28.5	22.3	26.7	19.7	20.9	22.2	31.3	29.4	34.8	27.6	27.2	22.3	-	
SA55NO	372871	400734	32.8	31.3	25.1	19.3	21.5	17.2	19.0	20.6	22.3	25.0	26.7	26.6	24.0	19.6	-	
SA56NO	368759	396027	16.2	16.0	12.4	9.0	9.4	6.9	7.3	8.2	10.6	12.5	18.7	14.0	-	-	-	Triplicate Site with SA56NO, SA57NO and SA58NO - Annual data provided for SA58NO only
SA57NO	368759	396027	15.7	15.1	12.5	8.8	9.1	6.9	7.0	8.2	10.4	13.1	18.6	16.2	-	-	-	Triplicate Site with SA56NO, SA57NO and SA58NO - Annual data provided for SA58NO only

SA58NO	368759	396027	16.2	16.2	12.4	8.0	9.3	6.9	7.2	8.5	10.9	13.3	19.2	13.7	11.8	9.7	-	Triplicate Site with SA56NO, SA57NO and SA58NO - Annual data provided for SA58NO only
SA59NO	381822	397895	37.8	30.9	27.3	23.4	25.6	21.1	21.8	18.6	33.1	28.2	36.8	29.3	27.8	22.8	-	
SA60NO	382445	397724	40.3	35.2	31.6	27.5	29.9	33.4	30.2	27.3	40.0	33.2	38.6	34.8	33.5	27.5	-	
SA61NO	377269	400943	45.7	39.8		33.7	33.3	31.9		28.4	45.2	32.1	43.4	43.3	37.7	30.9	-	
SA63NO	374673	399912	40.4	42.3	36.8	35.0	31.7	44.1	39.3	42.7	33.2	33.0	40.2	37.5	38.0	31.2	-	
SA64NO	378805	399848	32.6	29.7	22.0	16.6	16.6	15.7	16.4	17.9	19.5	22.7	32.6	26.8	22.4	18.4	-	
SA65NO	378584	399220	48.2	43.0	35.8	33.9	31.3	34.5	32.9	33.9	31.7	38.2	44.6	38.9	37.2	30.5	-	
SA66NO	375118	398502	34.1	30.2	28.8	22.3	27.0	15.3	19.0	20.3	30.0	31.4	36.8	29.4	27.1	22.2	-	
SA68NO	373570	403096	45.6	49.0	41.5	34.6	40.6	32.7	35.0	35.3	38.5	48.5	48.3	43.3	41.1	33.7	-	
SA69NO	379397	401370	46.0	44.4	40.9	33.4	39.3	38.7	37.3	36.1	32.4	39.8	35.7	40.4	38.7	31.7	-	
SA70NO	381677	398832	28.6	30.5	22.2	18.4	21.0	18.8	19.2	18.1	25.3	25.6	34.2	27.7	24.1	19.8	-	
SA72NO	377536	401804	45.9	39.5	35.7	33.2	36.1	36.9	36.1	34.1	43.7	44.1	49.3	40.4	39.6	32.5	-	
SA73NO	374576	400611	52.0	38.0	38.1	31.4	35.6	29.1	30.3	32.6	36.8	37.2	60.0	34.5	38.0	31.1	-	
SA74NO	376315	399249	41.0	40.1	32.0	28.9	27.9	26.0	26.8	29.9	27.6	34.8	40.2	38.9	32.8	26.9	-	
SA75NO	379608	398539	37.6	36.8	27.7	22.0	25.7	20.3	20.0	22.1	26.4	28.2	25.0	30.0	26.8	22.0	-	
SA76NO	380540	398422	40.3	39.5	29.8	23.7	26.1	24.5	23.3	24.2	27.4	34.3	44.8	32.9	30.9	25.3	-	
SA77NO	381686	398504	33.3	34.3	29.3	22.6	25.0	18.6	22.2	22.9	27.7	29.7	39.2	30.0	27.9	22.9	-	
SA78NO	381220	399530	48.0	48.8	42.4	36.2	41.2	35.7	34.0	28.4	34.7	43.8	45.4	40.5	39.9	32.7	-	
SA79NO	382602	398519	42.7	40.7	33.6	27.2	28.2	29.0	29.7	29.7	30.2	47.3	44.6	34.7	34.8	28.5	-	
SA80NO	375428	401417	33.0	31.5	22.4	21.7	23.0	29.6	25.0	24.7	27.7	25.0	30.3	28.9	26.9	22.1	-	
SA82NO	375394	397816	50.4	45.2	39.5	36.8	39.3	39.8	36.0	37.1	47.5	39.8	43.0	40.5	41.2	33.8	-	
SA83NO	382945	400732		30.4	24.0	18.7	21.6	19.2	19.8	21.5	22.2	28.2	33.6	27.7	24.3	19.9	-	
SA84NO	380776	400834	33.5	29.4	25.3	19.4	23.0	20.0	19.0	21.1	24.4	32.0	34.9	30.1	26.0	21.3	-	

SA85NO	375991	399237	29.6	27.9	22.6	19.5	18.7	15.2	15.5	16.3	23.2	24.7	32.2	27.9	22.8	18.7	-	
SA86NO	383819	401771	52.9	49.8	46.4	45.0	48.4	45.1		42.9	47.5	45.7	55.6	42.7	47.5	38.9	29.7	
SA87NO	372225	395616	28.4	28.7	21.2	19.8	21.1	26.1	24.7	21.5	25.5	23.0	28.8	29.9	24.9	20.4	-	
SA89NO	373892	404569	37.0	29.3	29.7	20.4	28.8	19.3	20.3	21.6	31.0	26.5	38.0	24.7	27.2	22.3	-	
SA90NO	381349	397162	27.1	29.8	25.7	19.4	25.4	16.8	20.3	20.8	29.6	24.7	39.2		25.3	20.8	-	
SA91NO	382580	397717	54.2	51.5	41.4	39.9	43.8	50.0	44.5	43.6	47.7	46.4	55.8	46.1	-	-	-	Triplicate Site with SA91NO, SA92NO and SA93NO - Annual data provided for SA93NO only
SA92NO	382580	397717	45.9	48.1	40.2	35.6	44.7	48.7		43.6	47.2	44.6	55.6	44.4	-	-	-	Triplicate Site with SA91NO, SA92NO and SA93NO - Annual data provided for SA93NO only
SA93NO	382580	397717	47.9	49.5	41.9	35.1	44.3	47.7	43.5	45.1	46.8	47.6	55.4	46.0	46.1	37.8	-	Triplicate Site with SA91NO, SA92NO and SA93NO - Annual data provided for SA93NO only
Stockport Metropolitan Borough Council																		
ST2NO	385047	388339	37.7	34.9	26.2	28.1	25.1	29.3	28.7	26.1		29.9	41.5	31.4	-	-	-	Triplicate Site with ST2NO, ST12NO and ST14NO - Annual data provided for ST14NO only
ST3NO	388551	391846	27.0	24.1	20.0	13.8	15.2	19.4	17.2	16.2	19.7	20.7	32.0	28.2	21.1	17.3	-	
ST4NO	396469	390800	17.1	11.9	11.7	8.8	9.7	8.7	9.7	10.3	13.0	13.3	17.7	15.1	12.3	10.0	-	
ST5NO	396869	382699	9.9	5.9	7.3	5.3	5.7	4.5	5.5	5.5	7.6	9.1	10.9	9.2	7.2	5.9	-	
ST6NO	385960	388552	22.1	18.4	12.2	10.9	12.4		11.0	8.8	15.2	15.1	21.3	18.5	15.1	12.4	-	
ST7NO	392063	386972	33.3	30.4	26.7	24.0		25.7	25.6	22.0	28.0	36.2	40.7	31.4	29.5	24.2	-	
ST8NO	392017	387043	26.2	6.6	16.0	13.8	15.0	15.9	15.2	13.1	15.1	19.7	23.1	21.5	16.8	13.7	-	
ST9NO	392743	385681	13.7	13.1	9.9	8.2	9.5	8.1	9.2	8.8	10.4	12.1	17.5	15.1	11.3	9.3	-	
ST10NO	392781	387271														-	-	
ST11NO	391083	387938	32.9	25.6	28.0	20.9	24.0	30.0	22.5	19.7	22.3	27.3	34.7	30.8	26.6	21.8	-	
ST12NO	385047	388339	32.3	32.2	26.9	24.5	24.7	30.2	31.1	25.5	26.2	32.5	36.9	34.3	-	-	-	Triplicate Site with ST2NO, ST12NO and ST14NO - Annual data provided for ST14NO only
ST13NO	384675	386295	21.4	17.2	12.4	8.9	12.0	11.2	12.6	11.0	13.8	15.6	21.7	20.3	14.8	12.2	-	
ST14NO	385047	388339	34.7	34.7	27.1	27.4	19.4	30.1	27.9	26.6	31.6	24.6	43.2	31.4	30.1	24.7	-	Triplicate Site with ST2NO, ST12NO and ST14NO - Annual data provided for ST14NO only

ST15NO	389886	388961	33.8	25.8	20.7	20.0	17.1	19.1	21.8	18.7	24.8	24.5	34.2	27.4	24.0	19.7	-	
ST16NO	391569	391226	29.2	25.7	17.2	17.1	19.4	18.8		33.2	23.4	22.7	29.2	26.3	23.8	19.5	-	
ST17NO	388442	390077	31.1	25.1	20.1	17.2	19.8	16.8	17.8	15.2	25.0	22.6	28.7	26.3	22.1	18.2	-	
ST18NO	389272	390441	37.2	31.4	25.2		36.2	27.4	26.0	22.3	25.5	28.6	34.3	31.5	29.6	24.3	-	
ST19NO	389479	393464	32.3	37.5	30.6	29.5		34.2	32.7	28.4	29.2	31.5	42.1	33.8	32.9	27.0	-	
ST20NO	386921	389529	55.6	34.7	28.9	33.1	30.1	43.2	32.8	28.3	42.8	25.1	35.4	37.3	35.6	29.2	-	
ST21NO	388599	389416	28.8	21.8	16.4	13.5	14.3	9.3	14.8	14.8	14.6	20.3	30.3	24.7	18.6	15.3	-	
ST22NO	391483	387636	26.7	20.7	0.9	44.2	19.9	14.1	15.2	13.9	11.5	21.5	30.5	25.3	-	-	-	Triplicate Site with ST22NO, ST23NO and ST24NO - Annual data provided for ST24NO only
ST23NO	391483	387636	25.5	22.8	19.7	15.8	20.3	13.5	15.3	11.9	21.2	20.0	29.0	23.4	-	-	-	Triplicate Site with ST22NO, ST23NO and ST24NO - Annual data provided for ST24NO only
ST24NO	391483	387636	26.1	24.1	20.1	17.0	22.0	14.0	16.6			21.2	29.0	23.0	20.1	16.5	-	Triplicate Site with ST22NO, ST23NO and ST24NO - Annual data provided for ST24NO only
ST25NO	395770	388655			22.8	19.5	30.1	20.6	16.5	16.4	22.2	22.9	27.8	23.5	22.2	18.2	-	
ST26NO	389396	387357	18.4	15.0	10.9	9.5	8.9	9.3	9.5	8.2		13.2	21.4	17.5	12.9	10.6	-	
ST27NO	387091	391384	20.7	16.3	13.2	11.3	10.3	8.8	10.4	9.4	14.2	16.0	21.6	19.8	14.3	11.8	-	
ST28NO	385700	386220	34.2	I/S	33.7	26.0	34.8	26.5	28.3	24.7	37.3	33.4	37.5	30.8	31.6	25.9	-	
ST29NO	390088	388545	19.5	17.7	12.4	10.8	10.8	11.1	11.9	10.8	14.8	16.8	25.8	19.6	15.2	12.4	-	
ST31NO	392442	391752				24.6		28.8							-	-	-	Insufficient data capture for annualisation
ST32NO	389480	390957	33.7	33.0	30.3	25.0	22.8	21.1	22.3	22.1	24.2	29.1	36.3	32.2	27.7	22.7	-	
ST33NO	390416	390087	38.0	37.8	28.8	25.3	28.1	29.0	27.5	24.6	31.8	31.9	39.2	32.7	31.2	25.6	-	
ST34NO	388304	390351		40.6	37.3	35.1		32.1	32.4	28.6	42.0	40.3	45.5	38.1	37.2	30.5	-	
ST35NO	395020	385360	26.9	18.4	19.6	18.4	23.8	22.6	20.2	16.9	25.4	21.5	28.2	22.4	22.0	18.1	-	
ST36NO	389386	390142	49.6	47.0	35.9	30.4	36.8	38.7	39.2	30.3	37.0	41.6	50.5	40.1	39.8	32.6	-	
Tameside Metropolitan Borough Council																		
TA1NO	394051	397180	28.2	28.0	23.6	19.2	19.2	17.1	18.8	17.4	22.3	24.6	28.5	30.5	23.1	19.0	-	

TA2NO	394788	394933	24.8	23.1	20.8	39.9	19.1	17.3	13.8	16.5					21.9	20.0	-	
TA3NO	390961	395417	28.0	23.6	23.6	18.7	21.3	15.3	14.4	16.2	27.8	26.4	28.9	26.0	22.5	18.5	-	
TASPNO	394194	399267		35.3	29.0	24.1	26.7	25.5	25.7	25.2	31.2	34.3	33.8	31.2	29.3	24.0	-	
TA5NO	400488	396539	14.0	13.2	10.7	7.9	8.3	7.2	7.4	8.1	10.1	10.1	12.3	15.4	10.4	8.5	-	
TA11NO	400390	396025	44.2	53.0	51.4	44.6	50.4	45.6	47.6	46.1	41.2	47.7	43.6	46.6	46.8	38.4	35.6	
TA13NO	392586	398431	43.9	43.2	31.8	29.4	32.1	37.9	35.0	31.7	33.5	31.7	42.5	45.5	36.5	29.9	-	
TA14NO	393696	398794	37.4	42.2	31.5			31.0	30.9	25.3		35.4	37.2	40.9	34.6	28.4	-	
TA16NO	391413	397974	34.4	45.4	35.4	29.5	35.8	33.5	26.9	31.5	36.7	37.7	37.2	46.4	35.9	29.4	-	
TA17NO	389106	398242	33.6	36.9	29.7	23.9	26.6	26.0	25.6	25.4	28.2	29.1	34.8	35.2	29.6	24.3	-	
TA18NO	391970	395521	39.6	41.3	35.2	32.5	36.3	29.9	34.5	30.9	39.1	37.1	24.8	43.5	35.4	29.0	-	
TA19NO	392477	395505	34.2	34.0	30.2	27.4	31.4	23.0	25.8	23.8	35.7	34.2	34.8	41.9	31.4	25.7	-	
TA20NO	394610	395102	22.6	40.2	36.2	25.3	30.0	34.3	29.1	27.7	33.7	33.7	32.0	I/S	31.3	25.7	-	
TA21NO	400423	395965	41.6	89.0	39.3	36.1	39.8	41.3	44.2	41.1	41.3	38.4	35.7	38.5	43.9	36.0	-	
TA23NO	393630	398598	22.5	24.0	16.5	14.6	16.4	13.6	15.1	13.5	19.2	22.8	26.0	25.7	19.2	15.7	-	
TA24NO	390475	395621	35.1	35.9	27.7	26.0	30.2	21.5	24.3	23.6	35.1	29.9	33.5	40.8	30.3	24.8	-	
TA25NO	396950	402329	26.2	26.9	19.9		19.6	17.6	17.3	16.8		23.2	25.4		21.4	17.6	-	
TA27NO	396177	398218	26.3	26.0	20.7	17.8	21.6	17.4	18.4		25.6	24.8	27.0	29.4	23.2	19.0	-	
TA28NO	393050	401038	37.4	39.9	31.2	23.2	23.9	26.2	27.6	22.4	24.3	27.9	29.5	35.0	29.0	23.8	-	
TA29NO	393370	399494	27.7	27.1	22.6	14.6	16.8	15.4	16.1	0.9	19.3	23.1	29.1	27.8	20.0	16.4	-	
TA30NO	393419	399691	36.7	41.7	32.5	23.1	28.2	25.9	27.1	25.0	29.8	31.8		79.4	34.7	28.4	-	
TA31NO	396899	402449	21.8	20.7	17.5	13.8	15.4	12.8	16.7	13.5	20.3	20.7	26.7	24.3	18.7	15.3	-	
TA32NO	396982	402437	22.0	22.3	22.6	18.7	19.6	16.5	17.2	16.2	17.4	23.5	23.5	25.3	20.4	16.7	-	
TA33NO	397011	402591	40.7	24.7	18.4	16.7	17.8	16.1	17.6	17.4	21.7	23.3	26.7	24.6	22.1	18.2	-	

TA34NO	397060	402581	24.4	24.8	20.8	15.5	17.4	16.0	15.7	15.9	19.9	20.9	24.9	24.2	20.0	16.4	-	
TA35NO	397080	402540	34.5	42.4	36.8	28.2	32.0	26.7	30.3	24.6	30.9	36.4	38.3	38.8	33.3	27.3	-	
TA36NO	397060	402387	21.3	17.4	15.4	12.7	13.2	13.8	15.5	14.3	15.4	18.7	23.7	26.0	17.3	14.2	-	
TA37NO	396728	402073	26.9	33.6	25.1	24.4	26.6	26.4	29.7	29.6	25.9	31.0	21.4	33.2	27.8	22.8	-	
TA38NO	394006	399392	34.3	32.3	24.9	20.5	21.6	23.3	22.2	21.6	25.3	23.0	31.1	33.8	26.2	21.4	-	
TA39NO	394114	399366	36.5	72.2	26.1	18.3	22.9	25.8	24.0	24.7	25.3	31.6	31.7	36.8	31.3	25.7	-	
TA40NO	394066	399314	31.8	29.5	19.9	19.7	21.9	20.7	21.6	20.2	23.6	27.3	30.5	40.2	25.6	21.0	-	
TA41NO	394118	399259	35.8	34.7	23.8	22.6	24.8	28.4	28.2	28.9	24.3	30.7	31.3	37.5	29.3	24.0	-	
TA42NO	394494	399010	41.7	32.0	22.4	18.6	20.1	19.6	33.9	34.4	25.1	29.1	36.3	42.8	29.7	24.3	-	
TA43NO	394204	398933	32.6	37.7	33.5	31.6	33.7	30.1	20.4	19.1	35.7	38.2	32.1	34.3	31.6	25.9	-	
TA44NO	397418	394398	16.6	13.8	11.6	9.5	10.0	10.5	9.9	9.6	12.8	13.1	16.0	16.6	12.5	10.3	-	
TA45NO	399719	395805	45.2	44.5	43.8	39.8	46.8	43.2			52.7	42.3		38.8	-	-	-	Triplicate Site with TA45NO, TA46NO and TA47NO - Annual data provided for TA47NO only
TA46NO	399719	395805	43.3	47.3	44.0	41.3	51.5	43.8	43.3	38.8	57.2	45.5	37.8	42.7	-	-	-	Triplicate Site with TA45NO, TA46NO and TA47NO - Annual data provided for TA47NO only
TA47NO	399719	395805	46.6	42.1	33.2	37.9	48.2	42.6	42.2	39.1	54.7	44.0	37.0		43.4	35.6	-	Triplicate Site with TA45NO, TA46NO and TA47NO - Annual data provided for TA47NO only
TA48NO	392699	395733													-	-	-	
TA49NO	393731	398770	37.6	35.9	25.6	23.9	27.4	30.1	25.1	26.8	30.7	27.6	32.7	39.9	30.3	24.8	-	
TA50NO	393498	398704	45.5	42.6	32.2	29.5	37.4	34.8	36.9	32.4	41.6	35.7	37.5	43.5	37.5	30.7	-	
TA51NO	393314	398624	45.5	31.7	28.0	26.0	30.3	34.2	31.6	29.8	36.5	31.5	39.8	41.8	33.9	27.8	-	
TA52NO	393509	398737	46.2	45.6	37.1	33.2	35.5	33.7	33.8	32.2	36.1	44.6	45.5	50.8	39.5	32.4	-	
TA53NO	393133	398536	37.4	39.1	29.9	29.1	33.6	24.3	26.8	24.8	33.9	35.6	41.3	40.1	33.0	27.1	-	
TA54NO	392958	398474	43.6	49.1	< 0.8	33.5	42.6	37.6	38.9		43.9	45.5	38.3	53.7	42.7	35.0	-	
TA55NO	392741	398469	53.0	52.2	49.2	42.6	45.3	48.7	39.4	42.0	39.8	48.9	44.1	40.7	45.5	37.3	31.3	
TA56NO	392490	398368	43.5	37.2	30.8	29.8	38.3	38.5	33.2		40.3	37.9	36.7	47.3	37.6	30.8	-	

TA57NO	392838	398533	45.5	38.7	37.0	33.7	36.5	31.1	33.2	30.9	37.1	36.7	38.7	51.8	37.6	30.8	-	
TA58NO	393080	398620	30.3	36.7	26.8	22.3	28.2	32.0	29.7	27.5	39.7	31.9	34.5	31.1	30.9	25.3	-	
TA59NO	395652	399140	21.5	20.1	15.7	10.9	17.5	11.0	16.4	11.1	14.0	16.9	20.7	24.7	16.7	13.7	-	
TA60NO	395747	399112	25.6	24.8	22.6	16.7	18.9	18.2	18.4	16.8	22.1	26.1	27.3	32.1	22.5	18.4	-	
TA61NO	395682	399171	26.6	25.5	21.3	14.9	11.1	16.2	11.6	17.1	19.2	22.1	26.2	30.7	20.2	16.6	-	
TA62NO	395589	399227	24.7	24.3	17.8	14.3	15.3	16.2	15.9	15.0	17.1	20.2	23.6	28.1	19.4	15.9	-	
TA63NO	394917	400922	32.1	32.2	25.4	20.0	21.8	20.6	20.6	21.0	25.2	27.1	31.2	36.6	26.2	21.4	-	
TA64NO	395787	398769	41.9	45.4	35.6	29.8	41.5	34.0	35.6	34.2	37.5	44.0	39.4	48.9	39.0	32.0	-	
TA65NO	392532	396768	35.4	33.2	27.2	21.8	25.2	26.8	26.4	22.6	28.1	31.2	30.8	37.4	28.8	23.7	-	
Trafford Metropolitan Borough Council																		
TR5NO	379052	392043	31.7	31.5	21.5	18.1	21.7	17.1	18.4	16.3	22.6	23.8	33.8	25.9	23.5	19.3	-	
TR9NO	380933	395889	28.2	28.2	18.5	17.2	17.5		17.1	17.2	20.3	26.9	33.1	25.4	22.7	18.6	-	
TR19NO	378783	394728	19.3	20.3	12.9	10.0	11.9			9.4	13.9	18.2	24.4	17.7	-	-	-	Triplicate Site with TR19NO, TR19ANO and TR19BNO - Annual data provided for TR19BNO only
TR19ANO	378783	394728	20.5		13.7	9.7	11.9		10.6	8.9	14.0	16.9	22.7	16.5	-	-	-	Triplicate Site with TR19NO, TR19ANO and TR19BNO - Annual data provided for TR19BNO only
TR19BNO	378783	394728	20.1	20.7	13.7	9.3	11.7		10.9	9.2	14.3	16.8	24.3	17.6	15.3	12.5	-	Triplicate Site with TR19NO, TR19ANO and TR19BNO - Annual data provided for TR19BNO only
TR20NO	379411	394014	32.7	34.3	27.3	20.3	23.3	20.8	20.8	19.9	25.1	25.5	32.7	26.1	-	-	-	Triplicate Site with TR20NO, TR20ANO and TR20BNO - Annual data provided for TR20BNO only
TR20ANO	379411	394014	33.1	27.8	24.5	19.7	25.1	21.6	21.0	20.2	22.7	26.4	36.4	27.1	-	-	-	Triplicate Site with TR20NO, TR20ANO and TR20BNO - Annual data provided for TR20BNO only
TR20BNO	379411	394014	34.4	30.9	27.9	18.2	22.9	21.0	21.6	19.8	24.3	26.3	33.8	32.2	25.8	21.1	-	Triplicate Site with TR20NO, TR20ANO and TR20BNO - Annual data provided for TR20BNO only
TR22NO	377089	390130	36.1	41.0	30.9	24.2	24.0	23.0		21.2	28.7	33.6	38.3	31.7	30.2	24.8	-	
TR15NO	379089	393282	29.1	27.5	22.7	20.2	25.2	14.0	18.2	14.8	30.2	27.8	32.8	25.7	24.0	19.7	-	

TR16NO	377418	395689	28.4	29.9	22.9	16.9	20.0	13.0	17.8	15.2	26.8	25.8	30.7	26.4	-	-	-	Duplicate Site with TR16NO and TR16ANO - Annual data provided for TR16ANO only
TR16ANO	377418	395689	30.4	26.2	21.7	17.0	23.1	14.1	16.9	16.6	26.0	26.8	31.2	23.6	22.8	18.7	-	Duplicate Site with TR16NO and TR16ANO - Annual data provided for TR16ANO only
TR23NO	376432	396355	34.1	26.1	21.4	25.5	26.5	22.8	23.3	19.8	30.2	26.0	35.4	32.5	27.0	22.1	-	
TR24NO	379263	385812	25.1	25.9	20.4	16.4	22.4	16.6	15.3	13.6	22.3	25.1	31.0	21.4	21.3	17.5	-	
TR25NO	373755	394477	15.8	14.8	11.0	8.9	9.9	7.2	8.5	7.8	12.1	13.4	17.8	12.4	-	-	-	Triplicate Site with TR25NO, TR25ANO and TR25BNO - Annual data provided for TR25BNO only
TR25ANO	373755	394477	15.5	13.4	10.4	7.4	10.5	6.9	8.9	8.8	11.7	13.1	18.0	12.7	-	-	-	Triplicate Site with TR25NO, TR25ANO and TR25BNO - Annual data provided for TR25BNO only
TR25BNO	373755	394477	15.5	14.3	11.2	8.1	9.5	7.2	9.0	7.8	12.0	13.1	17.7	15.3	11.6	9.5	-	Triplicate Site with TR25NO, TR25ANO and TR25BNO - Annual data provided for TR25BNO only
TR27NO	371419	390760	23.8	24.2	16.4	13.4	16.5	14.5	14.6	12.7	16.8	19.9	28.0	24.0	18.7	15.4	-	
TR28NO	376804	387740	35.2	33.8	19.4		28.2	25.3	25.3	22.8	30.3	30.0	35.3	30.6	28.7	23.6	-	
TR29NO	373906	392820	25.3	25.5	13.8	15.6	19.1	15.2	13.9	13.9	22.2	19.7	24.5	21.8	19.2	15.8	-	
TR31NO	376205	392690		34.6	28.6	24.8	36.7	27.4	28.0	23.0	36.3	35.7	34.1	31.4	31.0	25.4	-	
Wigan Metropolitan Borough Council																		
WI24NO	358341	405539	27.5	30.5	25.5	19.6	18.5	17.0	19.1	19.5	22.0	28.0	34.5	25.3	23.9	19.6	-	
WI33NO	359723	405537	35.8	36.1	37.9	27.6	32.6	27.4	29.6	29.7	31.1	37.1	44.3	33.5	33.6	27.5	-	
WI52NO	362137	396948	34.2	36.2	32.0	19.3	31.7	24.8	26.6	27.9	27.8	34.7	37.1	33.4	30.5	25.0	-	
WI81NO	355979	410362	25.1	24.0	18.0	14.5	18.0	17.6	16.5	15.3	19.7	19.4	26.6	21.0	19.6	16.1	-	
WI114NO	365115	400259	36.9	41.4		33.2	34.2	32.1	31.7	32.6	32.8	37.1	41.3	37.4	35.5	29.1	-	
WI148NO	361247	404576	32.7	31.2	27.7	20.0	25.1	20.1		22.4	26.1	29.7	31.4	27.8	26.7	21.9	-	
WI156NO	366320	402136	26.5	26.3	22.6	15.2	19.2	13.9	15.6	16.5	21.0	23.4	29.0	24.7	21.2	17.3	-	
WI161NO	369635	402019	30.4	29.2	23.8	15.9	20.0	17.3	17.9	17.3	24.3	23.4	32.2	30.1	23.5	19.3	-	
WI167NO	363544	397933	27.4	27.6	20.2	17.1	18.9	17.2	16.9	17.1	19.5	20.9	25.1	21.6	20.8	17.0	-	
WI168NO	362463	397005	29.2	35.2	27.9	22.2	20.4	18.5	21.8	23.3	23.3	28.3	35.8	29.1	26.3	21.5	-	

WI169NO	362557	396906	34.1	29.9	23.2	20.3	22.3	23.1	25.2	20.7	32.0	24.3	29.8	28.2	26.1	21.4	-	
WI170NO	362236	396675	28.6	25.3	18.3	19.3	20.7	21.8	21.0	19.0	28.7			24.8	22.8	18.7	-	
WI172NO	356881	401314	27.5	28.7		19.6	24.2	16.5	19.2	20.3	25.1	27.0	32.9	26.0	24.3	19.9	-	
WI177NO	356230	410105	29.5	26.3	21.5	19.0	21.0	16.8	16.4	17.4	24.7	27.8	30.9	24.7	23.0	18.9	-	
WI178NO	356021	410128	42.3	36.0	30.5	30.6	37.4	27.8	30.7	27.6	39.5	35.8	45.8	34.8	34.9	28.6	-	
WI180NO	362105	396491	45.6	52.0	42.5	48.4	49.8	54.2	45.6	43.5	45.1	45.2	52.4	47.9	47.7	39.1	-	
WI181NO	354819	406235	34.4	32.8	26.1	23.4	27.0	23.2	25.4	22.7	31.3	28.8	35.9	32.2	28.6	23.5	-	
WI186NO	358070	405587	46.1	41.0	43.2	31.0	37.0	30.5	36.5	36.7	47.6	48.7	51.4	35.4	40.4	33.1	-	
WI188NO	362111	396526	30.6	35.3	29.5	27.7	31.1	34.2	27.6		26.7	31.9	24.7	32.2	30.1	24.7	-	
WI205NO	362151	396604	26.5	28.6	24.7	19.8	22.8	17.0	19.0	21.3	20.2	26.4	25.9	25.7	23.2	19.0	-	
WI208NO	365686	400243	32.6	30.3	25.0	21.8	23.0	21.7	22.9	24.1	24.2	26.6	36.3	29.3	-	-	-	Triplicate Site with WI208NO, WI209NO and WI210NO - Annual data provided for WI210NO only
WI209NO	365686	400243	34.7	32.1	26.5	20.7	21.6	22.7	23.4	24.3	24.7	26.7	40.6	29.3	-	-	-	Triplicate Site with WI208NO, WI209NO and WI210NO - Annual data provided for WI210NO only
WI210NO	365686	400243	32.0	34.0	25.7	19.6	22.8	23.4	23.2	24.2	23.2	25.3	36.5	28.9	26.8	22.0	-	Triplicate Site with WI208NO, WI209NO and WI210NO - Annual data provided for WI210NO only
WI213NO	362019	396512	17.9	22.0	16.5	12.3	15.9	3.9	12.4	12.3	16.9	18.9	24.9	21.8	16.3	13.4	-	
WI216NO	358464	405342		45.8	38.4	37.0	39.2		37.2				57.8	41.4	42.4	33.5	-	
WI217NO	357780	405306	30.7	31.3	28.6	16.2	21.5	12.5	18.3	19.6	24.0	28.9	33.8	29.1	24.5	20.1	-	
WI219NO	357484	405407	28.2	29.5	24.0	15.2	18.4	11.3	15.2	17.2	20.4	24.0	32.6	27.9	22.0	18.0	-	
WI220NO	357420	405407	25.7	24.1	19.3	15.0	16.9	12.9	15.3	14.7	21.5	22.2	29.0		19.7	16.1	-	
WI221NO	360499	397867	28.7	26.5	20.9	17.6	18.6	18.0	18.0	17.6	19.5	21.9	30.9	20.5	21.6	17.7	-	
WI222NO	360491	397842	33.0	31.5	25.9	20.5	23.9	22.3	22.4	22.2	24.4	28.7	35.7	28.5	26.6	21.8	-	
WI223NO	360430	397779	32.5	29.1		19.0	17.4	16.4	18.3	18.5	20.9	22.9	33.0	26.1	23.1	18.9	-	
WI224NO	360418	397775	38.0	40.4		57.9	27.7	27.0	27.2	26.1	32.6	35.3	43.7	34.8	35.5	29.1	-	

WI225NO	360459	397995	29.5	29.1	23.0	16.4	17.9	14.2	17.2	18.2	21.2	26.3	24.3	22.3	21.6	17.7	-	
WI226NO	360462	398006	27.0	25.3		17.4	18.9	13.0	16.0	14.9	20.9	25.9	30.6	24.1	21.3	17.4	-	
WI227NO	360576	398144	29.1	30.5	25.2	19.7		19.3	20.2	21.7	23.7	27.5	35.8	28.4	25.6	21.0	-	
WI228NO	360578	398126	27.5	27.8	22.7	19.9	22.1	20.6				24.9	31.5	26.8	24.9	20.4	-	
WI230NO	360380	397912	29.9	35.9		21.3	28.3	25.0	26.3	26.2	25.2	31.1	40.0	31.7	29.2	23.9	-	
WI231NO	357473	398990		52.4	26.2	21.8	29.7	22.2	23.6	22.6	33.5	29.4	31.8	27.7	29.2	23.9	-	
WI232NO	357635	399502	26.9	25.2	19.2	15.3	16.2	11.3	13.0	15.7	14.7	20.9	30.5	22.0	19.2	15.8	-	
WI233NO	357445	406461	25.1	27.4	20.8	16.5		12.5	15.2	15.8	19.8	21.0	30.0	24.3	20.8	17.0	-	
WI234NO	363136	403467	36.0	34.7	30.5	21.7		20.9	22.6		26.6	31.6	35.1	30.7	29.0	23.8	-	
WI235NO	365419	399116	24.2	27.3	20.8	15.1	18.1	16.1	16.9	18.4	18.4	19.0	33.3	21.6	20.8	17.0	-	
WI236NO	365386	400353	23.7	23.5	17.3	11.4		10.5	I/S	12.6	15.1	18.0	27.1	20.7	18.0	14.8	-	
WI237NO	367352	403200	29.8	29.1	26.7	15.3		13.7	16.5	16.6	23.5	25.1	32.8	26.5	23.2	19.1	-	
WI238NO	369056	402146	29.9		23.2	18.7	20.3	17.0	18.2	18.4	20.0	26.8	30.4	26.2	22.6	18.6	-	
WI239NO	357092	404213	23.3	24.2	18.8	12.1	14.0	9.8	12.6	13.4	15.7	19.4	27.5	20.9	17.6	14.5	-	
WI240NO	360220	407146	28.0	21.8	17.5	13.5	17.0	13.3	14.8	14.3	21.7	20.4	26.0	22.5	19.2	15.8	-	
WI241NO	358025	406658	33.3	27.9	21.2	18.5	18.8	15.4	17.0	18.3	22.5	28.0	34.1	27.1	23.5	19.3	-	
WI244NO	357610	406859	25.3	27.6	25.1	15.7	17.3	12.5	14.1	15.9	21.2	25.9	29.3	24.4	21.2	17.4	-	
WI245NO	358133	405492	50.1	58.8	41.7	38.6	49.2	51.4	48.0	51.4		47.6	57.1	52.5	49.7	40.7	26.5	

- ☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1.
- ☒ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.
- ☐ Local bias adjustment factor used.
- ☒ National bias adjustment factor used.
- ☒ Where applicable, data has been distance corrected for relevant exposure in the final column.
- ☒ Greater Manchester confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:
 Exceedances of the NO₂ annual mean objective of 40 µg/m³ are shown in **bold**.
 NO₂ annual means exceeding 60 µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.
 See Appendix C for details on bias adjustment and annualisation.

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

New or Changed Sources Identified Within Greater Manchester During 2024

Greater Manchester Regional Sources

Air Quality episode notifications were received from the Met Office and Bureau Veritas during 2024 relating to predicted high pollution episodes. Some of these were recorded in the GM automatic monitor network. Notable examples include:

- Elevated levels of SO₂ linked to an Icelandic volcanic eruption between 31/05/24 to 03/06/24. This was recorded as a spike in SO₂ concentrations at both the Manchester Piccadilly and Manchester Sharston monitors on 31 May. Neither site exceeded the air quality objectives.
- High PM pollution period covering Diwali and Bonfire Night, from 1 to 10 November. Weather forecasts indicated light winds over the first weekend, with possible local increases in PM₁₀ and PM_{2.5} levels. Both Bury Prestwich and Rochdale Queensway recorded 24-hour PM₁₀ concentrations above 50 µg/m³ on 5 November.
- Events, such as large fires, are being monitored to ascertain if there are any effects on regional air quality.

Bolton Metropolitan Borough Council

Air quality assessments were received and considered for 11 planning applications. The air quality impact was determined as negligible/not significant for all the developments, although some required mitigation measures during the construction phase of the development in the form of a construction environmental management plan (CEMP).

Notable applications included:

- **17849/24**| DEVELOPMENT COMPRISING UP TO 33,189SQM OF B8 USES AND ANCILLARY DEVELOPMENT BL6 6JL
- **17926/24**|DEVELOPMENT OF BIO-CNG HGV FUELLING FACILITY COMPRISING FUEL DISPENSER ISLANDS, PLANT COMPOUND, CREATION OF ACCESS AND ASSOCIATED DEVELOPMENT. BL5 1DQ
- **17975/24**|RESERVED MATTERS APPLICATION FOR APPEARANCE, LANDSCAPE, LAYOUT AND SCALE FOR THE ERECTION OF 126no.

RESIDENTIAL DWELLINGS PURSUANT TO OUTLINE APPROVAL 91352/14. BL6 5UE

In addition to these, 27 CEMPs were submitted to address emissions associated with construction of developments (increase from 19 in 2023). There were no new Part A or Part B industrial installations permitted under The Environmental Permitting (England and Wales) Regulations 2016 in Bolton in 2024.

Bury Metropolitan Borough Council

No new building/land developments that have taken place in 2024 are likely to have significant impacts on local air quality. Future developments at Northern Gateway and Simister Island that could be significant have progressed through the relevant development control regimes. Through these regimes the council and planning inspectorate can check the relevant air quality assessments to make sure that there will be no significant impacts on air quality objectives

Manchester City Council

No new sources were identified in 2024 with potential to impact air quality. One Part B Environmental Permitting Regulations site began operation during 2024:

- British Car Auctions, Redgate Lane M12 4RX. Respraying of road vehicles.

One Part B Environmental Permitting Regulations site closed during 2024:

- Electrium Sales Limited, Sharston Road, M22 4RA. Coating of metal and plastic.

Oldham Metropolitan Borough Council

In 2024, two natural gas-powered engines of 2.5 MW and 2 MW began operating on Tweeddale Way, Chadderton, Oldham. They are used as short-term operating reserves and provide electricity to the national grid.

Rochdale Metropolitan Borough Council

A number of new developments have been granted planning permission over the past few years, with substantial dwellings to be located around Castleton, Rochdale. In addition, plans have passed for the development of 481 dwellings in Littleborough, 347 in Middleton and 1,500 in the area around Heywood as part of the Heywood Masterplan. Plans are also coming forward for the development of Atom Valley and we are implementing measures to ensure that sustainable building methods are used, and EV charging infrastructure and solar panels are included as part of the planning process.

Salford City Council

A planning application search was conducted for all types of major development that were approved during 2024 with an associated air quality assessment. 20 results were generated; none were deemed to have a significant adverse impact on air quality. Dust control mitigation measures were proposed during the construction/demolition phase for the majority of developments. Recommended mitigation measures included installation of EV charging points at developments in accordance with Salford City Council Local Plan policies, EPUK/IAQM 'Land-Use Planning & Development Control: Planning for Air Quality' guidance and Building regulations requirements.

There were no planning applications for large biomass installations, combined heat and power or district heating schemes during 2024.

In 2024, three part A industrial process permit variations were granted as follows:

- EPR/BU1580IV – Magnesium Elektron Ltd: Permit variation to include emission limits & monitoring requirements for existing medium natural gas combustion plant boilers.
- EPR/CP3123LM - Tenmat Limited (Medium Combustion Plant and Specified Generator): Standard rules SR2018 No 1 environmental permit for an existing low risk specified generator between 0 – 5 MWth.
- EPR/QP3328SE – M & I Materials Limited (activities involving the pyrolysis, carbonisation, distillation, partial oxidation or other heat treatment of oil otherwise than with a view to making charcoal): Standard rules SR2009 No.2 environmental permit for low impact Part A installation.

The air quality impact of these permit variations is not considered significant, assuming the use of best available techniques to minimise pollution.

There have been no new part A2 or B industrial installations that were permitted by Salford City Council during 2024 under The Environmental Permitting (England and Wales) Regulations 2016.

Stockport Metropolitan Borough Council

Stockport Council has not identified any new sources relating to air quality within the reporting year of 2024. In 2024, the Environmental Regulation team reviewed a significant number of planning applications for new developments. Over 70 applications were reviewed for potential air quality impacts from new developments including construction and demolition phases.

Planning applications are reviewed to assess potential impacts of new developments on local air quality including the Stockport Air Quality Management Area and locations

included in the GM Clean Air Plan. Planning applications are reviewed for impacts of bringing sensitive receptors to locations where levels of nitrogen dioxide exceed or are close to exceeding legal limit values.

Trafford Metropolitan Borough Council

During 2024 Trafford Council reviewed over 9,636 planning applications in relation to potential air quality impacts from construction and demolition works.

Applications which required detailed air quality assessments in relation to potentially significant air quality impacts included new residential development within or adjacent to the AQMA, significant new warehousing/distribution space and energy generating facilities. No significant impacts were identified through the air quality assessments, but mitigation measures have been included within planning permissions wherever possible. Mitigation measures include installation of sustainable vehicle charging points and travel plans.

Additional Air Quality Works Undertaken by Greater Manchester During 2024

Bury Metropolitan Borough Council

Bury Council continue to work with neighbouring GM local authorities and TfGM to finalise and publish the GM Clean Air Plan which shows how we intend to meet nitrogen dioxide limit values in the shortest time possible.

Salford City Council

Salford City Council continues to implement energy efficiency measures across its portfolio to reduce its carbon emissions, which will also result in reduced air pollutant emissions. Recent work includes:

- Unlocking Clean Energy in Greater Manchester: A 2 MW solar farm and 0.6 MW solar PV car ports have been operational since May 2024, which has seen 1,760 MWh of electricity generated saving over 1,000 tonnes of CO₂ - the equivalent of planting 1,100 trees.
- Roof Mounted Solar PV panels have been installed at 9 sites across the City Council estate, which has added a further 0.6 MW of renewable energy generation to the portfolio. It is estimated that these will generate 454,000 kWh of electricity and save 88 tonnes of CO₂ each year.

- Fleet Decarbonisation - Two new electric vehicle types purchased, Tipper and Sweeper
- Under the Public Sector Decarbonisation Scheme 3a (a funding scheme to support public sector bodies to transition to low carbon heat and energy efficiency measures in their buildings):
 - £233K grant has been secured.
 - Air Source Heat Pumps and energy efficiency measures have been installed in a further two sites, resulting in 39 tonnes of CO₂ savings annually.
- The Greener Salford Campaign website continues to encourage residents to act on climate change, highlighting best practice and providing hints, tips and guidance. Two campaigns were run through 2024 on 'Travel and Transport' and 'Homes' using the website and electronic advertising throughout the city to share messages with residents.

QA/QC of Diffusion Tube Monitoring

Diffusion tubes used by Greater Manchester are supplied by Staffordshire County Council Highways Laboratory as 20% TEA in Water solution. The Air Quality Review and Assessment website gives a bias adjustment figure of 0.82 for the 2024 data set.

The diffusion tube monitoring program was completed generally in line with the 2024 Diffusion Tube Monitoring Calendar. However, in some districts, collection of diffusion tubes and returning to the analysis laboratory was affected by local issues (see Section 3.2.1 for further information). These tubes have been noted and the affected monthly results removed from the analysis calculations.

The AIR NO₂ Proficiency Testing (PT) scheme uses laboratory spiked Palmes-type diffusion tubes to assess each participating laboratory's analytical performance on a quarterly basis.

Staffordshire County Council Highways Laboratory have provided a 100% satisfactory response to tested samples up to February 2025 (latest data provided by the laboratory). This continues a 100% satisfactory response to tested samples achieved since the 2022 AIR PT rounds.

Table C.1 lists those UK laboratories undertaking LAQM activities that have participated in recent AIR NO₂ PT rounds and the percentage of results submitted which were

subsequently determined to be satisfactory. As noted in the LAQM QA-QC Framework, [link to 'AIR-PT-Rounds 55 to 68 \(February 2023 to February 2025\)'](#).

Diffusion tube precision can be described as the ability of a measurement to be consistently reproduced, i.e., how similar the results of duplicate or triplicate tubes are to each other. For the purposes of Local Air Quality Management, tube precision is separated into two categories, “good” or “poor.” The results of the AIR PT and a field inter-comparison exercise precision survey indicated a good overall level of precision with collocated studies for the Staffordshire County Council Highways Laboratory diffusion tubes over the past three years. A summary of the results of collocated diffusion tube analysis by various laboratories is presented in Table C.2, as noted at the following LAQM [link to Precision and Accuracy](#).

Monthly Outliers

Diffusion tube data will occasionally report monthly concentrations that do not correlate with expected values at this site. Table C.3 outlines outlying monthly values, including the annual mean at the site before and after the outlier has been removed.

These monthly concentrations have been regarded by the Authority as erroneous given the type of location, and comparison with other measured concentrations from the same location. Consequently, these have been removed from the annual results. Similarly, for months where diffusion tubes were otherwise compromised, in a manner potentially affecting the readings, as noted by the analysis laboratory, they have been disregarded.

Where this has resulted in datasets with less than 75% data capture, they have proceeded to be annualised in accordance with LAQM.TG22.

Diffusion Tube Annualisation

Annualisation is required for any site with data capture less than 75% but greater than 25%. Annualisation was required for 47 locations which had less than a 75% capture rate, due to the factors noted above or tubes missing at collection time. The sites requiring annualisation are shown in Table C.4.

The Automatic Urban and Rural Network urban background sites at Manchester Piccadilly (UKA00248, Easting/Northing: 384311, 398337), Bury Whitefield (UKA00598, Easting/Northing: 380637, 406974), Manchester Sharston (UKA00617, Easting/Northing:

384201, 386122) and Wigan (UKA00482, Easting/Northing: 357816, 406024) have been used to provide an annualisation correction factor which was applied to the sites. Details of the calculation method undertaken are provided in Table C.4.

The remaining diffusion tube monitoring locations within Greater Manchester recorded data capture of greater than 75% and so it was not required to annualise these monitoring data.

Table C.1 - Laboratory summary performance for AIR Nitrogen Dioxide PT rounds, 2023-2025

AIR PT Round	AR055	AR056	AR058	AR059	AR062	AR063	AR065	AR068	AR068
Round conducted in period	Jan – Feb 2023	May – June 2023	July – Aug 2023	Sep – Oct 2023	Jan – Feb 2024	April – June 2024	July – Aug 2024	Sep – Oct 2024	Jan – Feb 2025
Aberdeen Scientific Services	100%	100%	100%	75%	100%	100%	100%	100%	100%
Edinburgh Scientific Services	100%	75%	100%	50%	100%	100%	100%	100%	100%
SOCOTEC	100 % [1]	100 % [1]	100 % [1]	100 % [1]	100 % [1]	100 % [1]	100 % [1]	100 % [1]	87.5 % [1]
Glasgow Scientific Services	100%	100%	100%	100%	75%	100%	100%	100%	100%
Gradko International	100%	100%	100%	100%	100%	100%	100%	100%	50%
Lambeth Scientific Services	0%	75%	50%	0%	50%	50%	50%	50%	100%
Milton Keynes Council	50%	75%	100%	100%	100%	NR [2]	50%	100%	100%
Somerset Scientific Services	100%	75%	100%	100%	100%	100%	100%	100%	100%
South Yorkshire AQ Samplers	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]	NR [2]
Staffordshire County Council	100%	100%	100%	100%	100%	100%	100%	100%	100%
Tayside Scientific Services	NR [2]	100%	NR [2]	NR [2]	NR [2]	NR [2]	100%	NR [2]	NR [2]

[1] Participant subscribed to two sets of test results (2 x 4 test samples) in each AIR PT round.

[2] NR, no results reported.

Table C.2 - Summary of Precision Results for Nitrogen Dioxide Diffusion Tube Collocation Studies by Laboratory, 2022-2024

Diffusion Tube Preparation Method	2022 Good	2022 Bad	2023 Good	2023 Bad	2024 Good	2024 Bad
Gradko, 50% TEA in Acetone	16	0	16	0	11	0
Gradko, 20% TEA in Water	33	0	25	0	30	0
ESG Didcot/SOCOTEC, 50% TEA in Acetone	29	0	33	2	33	4
ESG Didcot/SOCOTEC, 20% TEA in Water	11	0	8	0	1	1
Staffordshire Scientific Services	13	0	12	0	20	0
Glasgow Scientific Services	3	3	1	0	1	0
Edinburgh Scientific Services	1	0	4	2	5	2
Milton Keynes Council	1	0	1	0	1	0
Tayside Scientific Services	1	0	1	0	1	0
Lambeth Scientific Services	6	4	10	1	7	1
Aberdeen Scientific Services	7	0	7	0	6	0
ESG Glasgow, 50% TEA in Acetone	1	0	1	0	1	0
ESG Glasgow, 20% TEA in Water	1	0	1	0	1	0
Somerset County Council	14	0	12	0	4	0

Table C.3 - Summary of Monthly Outliers

District	Diffusion Tube	Month	Concentration Observed ($\mu\text{g}/\text{m}^3$)	Observation	Annual Mean including Outlier ($\mu\text{g}/\text{m}^3$)	Annual Mean excluding Outlier ($\mu\text{g}/\text{m}^3$)
Bury	BU1NO	July	2.9	Low	20.1	21.9
Oldham	OLCW3NO ⁽¹⁾	August	6.3	Low	21.9	22.5
Rochdale	RO2ANO	May	130.9	High	30.7	24.5
Rochdale	RO2ANO	September	18.6	Low	30.7	24.5
Rochdale	RO10ANO	September	2.7	Low	11.1	12.3
Rochdale	RO20ANO	August	13.4	Low	28.6	30.2
Rochdale	RO23ANO	March	1.1	Low	24.0	26.1
Tameside	TA21NO	February	89.0	High	36.0	32.6
Tameside	TA29NO	August	0.9	Low	16.4	17.9
Trafford	TR22NO	July	3.9	Low	23.0	24.8
Wigan	WI170NO	November	59.5	High	21.4	18.7
Wigan	WI216NO	October	4.1	Low	29.3	33.5
Wigan	WI231NO	January	2.3	Low	22.1	23.9

Note:

(1) Part of a triplicate site, annual mean reported as averaged result.

Table C.4 – Annualisation Summary (concentrations presented in $\mu\text{g}/\text{m}^3$)

Site ID	Annualisation Factor Manchester Piccadilly AURN (UKA00248)	Annualisation Factor Bury Whitefield AURN (UKA00598)	Annualisation Factor Manchester Sharston AURN (UKA00617)	Annualisation Factor Wigan Centre AURN (UKA00482)	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean	Comments
BO3NO	0.8286	0.8442	0.7949	0.7653	0.8082	46.9	37.9	
BO4NO	0.8906	0.9194	0.8599	0.8728	0.8857	21.9	19.4	
BO8NO	0.8906	0.9194	0.8599	0.8728	0.8857	23.2	20.5	
BO11NO	0.8906	0.9194	0.8599	0.8728	0.8857	12.6	11.1	
BO14NO	0.8906	0.9194	0.8599	0.8728	0.8857	21.8	19.3	
BO15NO	0.8906	0.9194	0.8599	0.8728	0.8857	27.8	24.6	
BO16NO	0.8906	0.9194	0.8599	0.8728	0.8857	18.3	16.2	
BO41NO	0.8906	0.9194	0.8599	0.8728	0.8857	32.0	28.3	
BO43NO	0.8906	0.9194	0.8599	0.8728	0.8857	30.7	27.2	
BO44NO	0.8906	0.9194	0.8599	0.8728	0.8857	-	-	<i>Duplicate Site with BO44NO and BO45NO - Annual data provided for BO45NO only</i>
BO45NO	0.8906	0.9194	0.8599	0.8728	0.8857	21.1	18.7	<i>Duplicate Site with BO44NO and BO45NO - Annual data provided for BO45NO only</i>
BO48NO	0.8906	0.9194	0.8599	0.8728	0.8857	24.4	21.6	
BO53NO	0.8906	0.9194	0.8599	0.8728	0.8857	34.6	30.6	
BO54NO	0.8906	0.9194	0.8599	0.8728	0.8857	14.1	12.5	
BO60NO	0.9873	1.0103	0.9224	1.0084	0.9821	23.6	23.2	
BO61NO	0.8906	0.9194	0.8599	0.8728	0.8857	35.8	31.7	
BO62NO	0.8906	0.9194	0.8599	0.8728	0.8857	34.2	30.3	

BO63NO	0.8448	0.8570	0.8000	0.7872	0.8222	23.4	19.2	
BO64NO	0.8906	0.9194	0.8599	0.8728	0.8857	25.9	22.9	
BO65NO	0.8906	0.9194	0.8599	0.8728	0.8857	26.0	23.0	
BO66NO	0.8906	0.9194	0.8599	0.8728	0.8857	28.0	24.8	
BO67NO	0.8857	0.9180	0.8777	0.8894	0.8927	17.7	15.8	
BO68NO	0.8906	0.9194	0.8599	0.8728	0.8857	31.1	27.5	
BO69NO	0.8578	0.9007	0.8470	0.8261	0.8579	43.5	37.3	
BO70NO	0.8906	0.9194	0.8599	0.8728	0.8857	18.5	16.4	
BO71NO	0.8906	0.9194	0.8599	0.8728	0.8857	43.5	38.5	
BO72NO	0.8906	0.9194	0.8599	0.8728	0.8857	27.7	24.6	
BO73NO	0.9873	1.0103	0.9224	1.0084	0.9821	33.8	33.1	
BO74NO	0.8906	0.9194	0.8599	0.8728	0.8857	39.4	34.9	
BO76NO	0.9387	0.9919	0.9249	0.9669	0.9556	-	-	<i>Triplicate Site with BO76NO, BO77NO and BO78NO - Annual data provided for BO78NO only</i>
BO77NO	0.9387	0.9919	0.9249	0.9669	0.9556	-	-	<i>Triplicate Site with BO76NO, BO77NO and BO78NO - Annual data provided for BO78NO only</i>
BO78NO	0.9387	0.9919	0.9249	0.9669	0.9556	27.5	26.2	<i>Triplicate Site with BO76NO, BO77NO and BO78NO - Annual data provided for BO78NO only</i>
BO79NO	0.8906	0.9194	0.8599	0.8728	0.8857	-	-	<i>Triplicate Site with BO79NO, BO80NO and BO81NO - Annual</i>

								<i>data provided for BO81NO only</i>
BO80NO	0.8906	0.9194	0.8599	0.8728	0.8857	-	-	<i>Triplicate Site with BO79NO, BO80NO and BO81NO - Annual data provided for BO81NO only</i>
BO81NO	0.8906	0.9194	0.8599	0.8728	0.8857	28.2	25.0	<i>Triplicate Site with BO79NO, BO80NO and BO81NO - Annual data provided for BO81NO only</i>
BU4NO	0.9242	0.9113	0.9430	0.8977	0.9191	36.4	33.4	
BU10NO	0.9732	0.9621	1.0156	0.9421	0.9733	34.6	33.7	
OLOBNO	0.8495	0.8522	0.8380	0.7859	0.8314	32.7	27.2	
OLFANO	0.9206	0.9142	0.8996	0.8735	0.9020	22.2	20.0	
OLSMWNO	1.0505	1.0862	1.0924	1.0544	1.0709	22.6	24.2	
OLLSNO	1.0202	1.0561	1.0331	1.0085	1.0295	27.0	27.8	
OLSWNO	1.0202	1.0561	1.0331	1.0085	1.0295	28.0	28.8	
RO3ANO	1.1058	1.1294	1.1301	1.1188	1.1210	15.6	17.5	
RO4ANO	1.0192	0.9849	0.9993	1.0990	1.0256	24.1	24.7	
RO10ANO	1.0027	1.0289	1.0119	0.9803	1.0060	14.9	15.0	
RO15ANO RO25ANO RO26ANO	-	-	-	-	-	-	-	<i>Not annualised due to low data capture</i>
TA2NO	1.1011	1.0664	1.0769	1.1997	1.1110	21.9	24.3	
WI216NO	0.9606	0.9529	0.9592	0.9806	0.9633	42.4	40.8	

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2024 ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance regarding the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on comparison of diffusion tube results with data taken from NO_x/NO₂ continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

GM applied a national bias adjustment factor of 0.82 to 2024 monitoring data. This is the overall factor calculated from 16 studies of Staffordshire County Highways Laboratory 20% TEA in Water diffusion tubes. Figure C.1 shows the April 2025 update to the National Diffusion Tube Bias Adjustment Factor Spreadsheet. A summary of bias adjustment factors used over the past five years is presented in Table C.5.

GM has calculated a local bias adjustment factor for 2024 using seven co-location sites (maximum number permitted by the Diffusion Tube Data Processing Tool). The sites are representative of the region and majority of diffusion tube sampling locations, utilising both AURN and Local Authority continuous analysers maintained to the same standard. The following co-location sites were used to determine the local bias adjustment factor Rochdale Queensway (RDL001), Manchester Piccadilly AURN (UKA00248), Manchester Sharston AURN (UKA00617), Trafford A56 (TRF2), Eccles AURN (UKA00339), Shaw Crompton Way AURN (UKA00579) and Stockport Cheadle A34 (STK7).

Local bias adjustment factors in the range 0.69 to 0.92 were determined using the Diffusion Tube Data Processing Tool v5.3 and are presented in Table C.6. Combining, according to LAQM.TG22, provides a local factor of 0.82. For clarity and completeness, calculation of local bias adjustments was verified using the Diffusion Tube Precision Accuracy Bias Spreadsheet, example results for RDL001 are shown in Figure C.2.

Due to the similarity in local and national bias factor, and following LAQM.TG22 guidance, it was decided to continue using the national bias factor to aid comparison with previous ASRs. The nationally derived factor includes locally derived factors based on co-location data sent to NPL, for which GM authorities contributed 12 of the 16 studies used. As such, the national factor is likely to be the more reliable.

Figure C.1 – Screenshot of National Diffusion Tube Bias Adjustment Factor Spreadsheet

National Diffusion Tube Bias Adjustment Factor Spreadsheet						Spreadsheet Version Number: 04/25					
Follow the steps below in the correct order to show the results of relevant co-location studies Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.										This spreadsheet will be updated at the end of June 2025 LAQM Helpdesk Website	
The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.						Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.					
Step 1:	Step 2:	Step 3:	Step 4:								
Select the Laboratory that Analyses Your Tubes from the Drop-Down List	Select a Preparation Method from the Drop-Down List	Select a Year from the Drop-Down List	Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor ³ shown in blue at the foot of the final column.								
If a laboratory is not shown, we have no data for this laboratory.	If a preparation method is not shown, we have no data for this method at this laboratory.	If a year is not shown, we have no data ²	If you have your own co-location study then see footnote ⁴ . If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953								
Analysed By ¹	Method To undo your selection, choose (All) from the pop-up list	Year ⁵ To undo your selection, choose (All)	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m ³)	Automatic Monitor Mean Conc. (Cm) (µg/m ³)	Bias (B)	Tube Precision ⁶	Bias Adjustment Factor (A) (Cm/Dm)	
Staffordshire County Council	20% TEA in water	2024	UB	Salford City Council	11	20	18	10.6%	G	0.90	
Staffordshire County Council	20% TEA in water	2024	B	Salford City Council	12	12	11	6.7%	G	0.94	
Staffordshire County Council	20% TEA in water	2024	R	Salford City Council	12	37	31	17.9%	G	0.85	
Staffordshire County Council	20% TEA in water	2024	R	Salford City Council	12	46	32	43.5%	G	0.70	
Staffordshire County Council	20% TEA in water	2024	KS	Marylebone Road Intercomparison	11	45	36	25.6%	G	0.80	
Staffordshire County Council	20% TEA in water	2024	R	Oldham Council	11	27	21	29.3%	G	0.77	
Staffordshire County Council	20% TEA in water	2024	UC	Manchester City Council	10	32	29	10.7%	G	0.90	
Staffordshire County Council	20% TEA in water	2024	SI	Manchester City Council	12	17	15	16.6%	G	0.86	
Staffordshire County Council	20% TEA in water	2024	R	Stockport Mbc	12	30	25	18.1%	G	0.85	
Staffordshire County Council	20% TEA in water	2024	R	Stockport Mbc	12	20	17	20.5%	G	0.83	
Staffordshire County Council	20% TEA in water	2024	R	Stoke-on-trent City Council	12	48	34	39.5%	G	0.72	
Staffordshire County Council	20% TEA in water	2024	R	Stoke-on-trent City Council	12	51	38	35.0%	G	0.74	
Staffordshire County Council	20% TEA in water	2024	UB	Stoke-on-trent City Council	12	21	18	14.4%	G	0.87	
Staffordshire County Council	20% TEA in water	2024	R	Trafford Bc	11	26	20	28.8%	G	0.78	
Staffordshire County Council	20% TEA in water	2024	UB	Trafford	11	11	10	11.3%	G	0.90	
Staffordshire County Council	20% TEA in water	2024	R	Bolton Council	11	26	20	30.7%	G	0.77	
Staffordshire County Council	20% TEA in water	2024		Overall Factor ³ (16 studies)					Use	0.82	

Table C.5 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.82
2023	National	03/24	0.86
2022	National	03/22	0.87
2021	National	03/21	0.86
2020	National	03/20	0.85

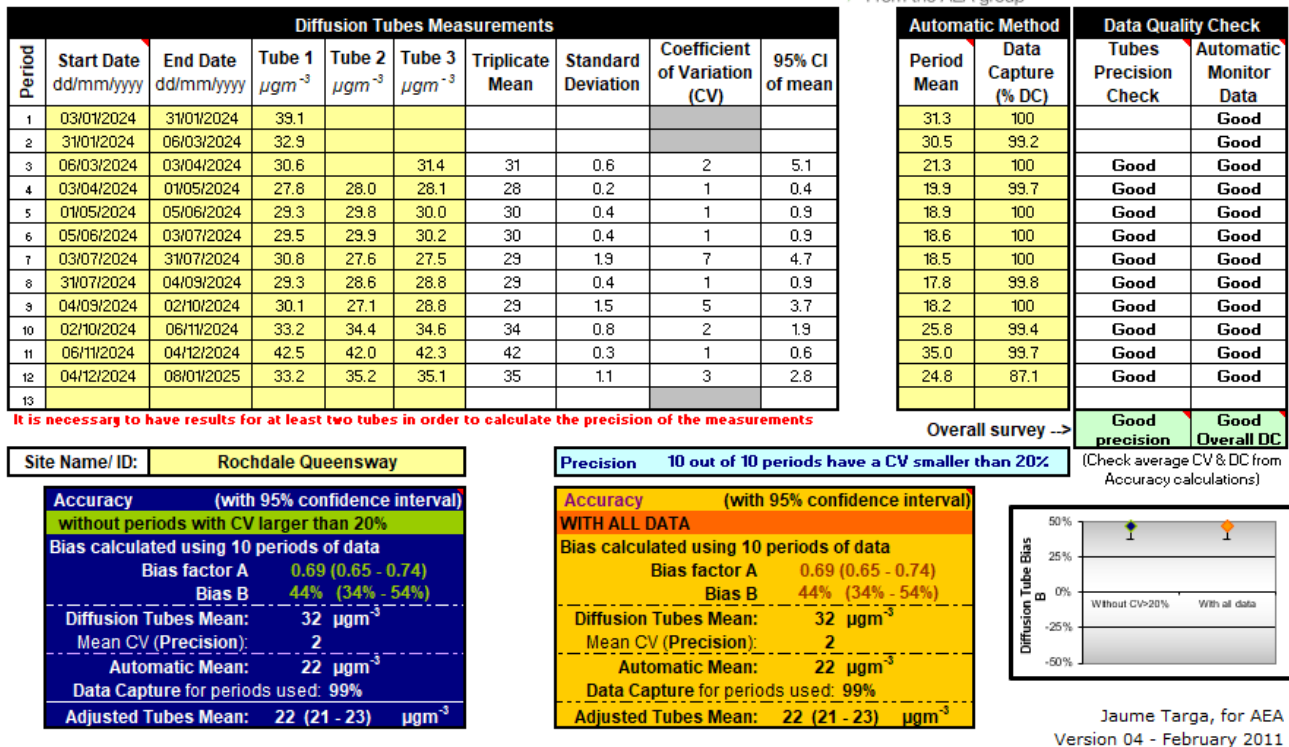
Table C.6 – Local Bias Adjustment Calculation

	Local Bias Adjustment Input 1 Rochdale	Local Bias Adjustment Input 2 Piccadilly	Local Bias Adjustment Input 3 Sharston	Local Bias Adjustment Input 4 Trafford	Local Bias Adjustment Input 5 Eccles	Local Bias Adjustment Input 6 Shaw	Local Bias Adjustment Input 7 Stockport
Periods used to calculate bias	10	11	12	11	12	10	12
Bias Factor A	0.69 (0.65 - 0.74)	0.92 (0.85 - 0.99)	0.86 (0.8 - 0.92)	0.79 (0.75 - 0.83)	0.91 (0.86 - 0.98)	0.77 (0.72 - 0.84)	0.84 (0.78 - 0.9)
Bias Factor B	44% (34% - 54%)	9% (1% - 17%)	17% (9% - 25%)	27% (21% - 34%)	10% (2% - 17%)	30% (20% - 40%)	19% (11% - 27%)
Diffusion Tube Mean ($\mu\text{g}/\text{m}^3$)	31.6	27.6	16.9	26.0	20.1	27.2	30.1
Mean CV (Precision)	2.4%	6.1%	4.6%	5.0%	3.1%	3.0%	7.1%
Automatic Mean ($\mu\text{g}/\text{m}^3$)	21.9	25.4	14.5	20.4	18.4	21.0	25.2
Data Capture	99%	100%	100%	100%	100%	100%	99%
Adjusted Tube Mean ($\mu\text{g}/\text{m}^3$)	22 (21 - 23)	25 (23 - 27)	15 (14 - 16)	21 (19 - 22)	18 (17 - 20)	15 (14 - 17)	17 (16 - 18)

Notes: The combined local bias adjustment factor was determined as 0.82. The has been provided for comparison with the national bias adjustment factor and has not been used to bias adjust the 2024 diffusion tube results. Please refer to explanation in text above.

Figure C.2 – Example screenshot of Local Diffusion Tube Precision Accuracy Bias Spreadsheet, Rochdale Queensway
Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
 From the AEA group



NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. Where this is not possible, the NO₂ concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO₂ fall-off with distance calculator available on the LAQM Support website. Where appropriate, non-automatic annual mean NO₂ concentrations corrected for distance are presented in Table B.1.

For 2024, distance correction was required at ten monitoring locations where the annual mean concentration is greater than 36 $\mu\text{g}/\text{m}^3$ and the monitoring site was not located at a point of relevant exposure (taking the limitations of the calculator into account). A further location (SA63NO) was included to ascertain the potential effect of a nearby motorway. After consideration it was not appropriate to include this in Table B.1 due to the uncertainties in the calculation. Defra 2021-based background maps for 2024 were used to obtain background NO₂ concentrations. The data are presented in Table C.7.

Table C.7 only shows distance corrections for tubes that meet the parameters used in the distance correction tool. Where it has not been possible to distance correct results, due to receptor to kerb or monitor to kerb distances being outside the limitations of the tool, these results have been omitted from the table.

Table C.7 – Non-Automatic NO₂ Fall off With Distance Calculations (concentrations presented in µg/m³)

Site ID	Distance(m) : Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted	Background Concentration	Concentration Predicted at Receptor	Comments
Bury Metropolitan Borough Council						
BU12NO	0.5	2.4	36.4	15.0	30.5	
Manchester City Council						
MA29ANO	2.5	4.5	51.3	20.4	46.8	<i>Predicted concentration at Receptor above AQS objective.</i>
MA75NO	0.5	3.5	37.2	14.9	29.5	
MA82NO, MA83NO, MA84NO	3.0	8.0	41.7	16.9	35.4	
MA96BNO	3.0	5.0	36.4	21.7	34.4	
Oldham Metropolitan Borough Council						
OL21SRNO	2.0	2.5	41.3	14.3	39.9	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
Salford City Council						
SA86NO	0.5	5.5	38.9	17.1	29.7	
SA63NO	21.5	10.0	31.2	16.2	37.2	<i>Predicted concentration at Receptor within 10% the AQS objective. Warning: Monitor is more than 10m further from the kerb than your receptor - treat result with caution.</i>
Tameside Metropolitan Borough Council						
TA11NO	2.0	3.0	38.4	9.1	35.6	
TA55NO	3.0	9.0	37.3	16.4	31.3	
Wigan Metropolitan Borough Council						
WI245NO	0.5	8.5	40.7	12.4	26.5	

QA/QC of Automatic Monitoring

Greater Manchester Air Quality Network (GMAQN)

Automatic air quality analysers in the GMAQN are subject to a high level of quality assurance/quality control. All analysers are either operated as part of the national Automatic Urban and Rural Network (AURN) or to equivalent standards.

Data management and ratification

Analysers that are not part of or affiliated to the AURN are part of the 'Calibration Club' scheme run by Ricardo-AEA (an independent organisation accredited to perform QA/QC checks on automatic monitoring equipment to the ISO17025:2017 standard for testing and calibration laboratories). Data management and ratification procedures are equivalent to the AURN, the key features being:

- Data screened daily for errors including manual and automatic checks.
- Data scaled in accordance with AURN and Defra Technical Guidance (LAQM.TG22) procedures.
- Data errors or faults reported to Local Site Operators on same or next working day.
- Independent site audits twice per year to check and evaluate a range of analyser key functions and check on-site calibration gases against traceable standards.
- Final data set scaled and ratified to same standard as the AURN.

Automatic data used in the report are fully ratified.

Analyser service and maintenance

Automatic analysers that are not part of or affiliated to the AURN have a dedicated Equipment Support Unit (ESU), which is currently Enviro Technology Services Ltd. The ESU service contract specification includes:

- Analyser routine servicing and maintenance twice per year to manufacturers specifications and AURN procedures.
- 48 hour callout to analyser non-routine maintenance and breakdown repair events.
- Air conditioning system routine service and maintenance in accordance with the manufacturers recommendations and 48 hour callout to attend maintenance and breakdown repair events.
- Fixed wire and portable appliance electrical testing.

Local Site Operators (LSOs)

Local authority officers perform LSO duties, which includes:

- Management of automatic sites within their local authority area.
- Routine instrument calibrations using calibration gases traceable to primary standards – every two weeks for Roadside sites, every four weeks for Urban Background/ Urban Industrial sites.
- Emergency call-out visits, including simple or temporary repairs as directed by the AURN management unit, Ricardo or the ESU.

Live and historic data are available through [the Air Quality England website](#) and [the Clean Air GM data hub](#).

PM₁₀ and PM_{2.5} Monitoring Adjustment

The reference method for measuring both PM₁₀ and PM_{2.5} is based upon using a gravimetric sampler. This samples ambient air through a size selective sampling head through a filter over a 24-hour period. The particulate concentration is measured by the mass difference of the filter before and after exposure and accounts for the volume of air sampled. However, this is labour intensive and cannot provide hourly measurements.

All automatic PM₁₀ and PM_{2.5} monitoring conducted for LAQM purposes uses Thermo Fisher Filter Dynamics Measurement System (FDMS), Met One Beta Attenuation Monitors (BAMs) or Palas Fidas 200 particulate analysers. These are all suitable for ambient air quality reporting purposes in the UK. For some instruments, a correction factor needs to be applied to raw data to be equivalent to the reference method:

- Met One Smart Heated BAM 1020 PM₁₀ data: Divide by 1.035
- Met One Unheated BAM 1020 PM₁₀ data: Multiply by 0.833
- Palas Fidas 200 PM_{2.5} data: Divide by 1.06

Where this is necessary, the correction factor is automatically applied to the raw data by Ricardo-AEA. Further information about UK approval of particulate matter monitoring instruments can be found on the [UK AIR website \(link in text\)](#).

Automatic Monitoring Annualisation

Annualisation is required for any site with data capture less than 75% but greater than 25%. Annualisation was required for two locations which had less than a 75% capture rate. Trafford Moss Park (TRAF) for both NO₂ and PM₁₀ and Wigan Leigh Three (WIG07) for NO₂. The annualised data are shown in Table C.8 and Table C.9 below.

The Automatic Urban and Rural Network urban background sites at Manchester Piccadilly (UKA00248, Easting/Northing: 384311, 398337), Salford Eccles (UKA00339, Easting/Northing: 377925, 398729) and Wigan Centre (UKA00482, Easting/Northing: 357816, 406024) have been used to provide an annualisation correction factor which was applied to the sites.

The remaining automatic monitoring locations recorded data capture of greater than 75%. Therefore, it was not required to annualise these monitoring data.

NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO₂ concentration at the nearest location relevant for exposure has been estimated using the NO₂ fall-off with distance calculator available on the LAQM Support website. Where appropriate, automatic annual mean NO₂ concentrations corrected for distance are presented in Table A.3.

Two automatic monitoring stations recorded an exceedance of the AQO, Bridge Street (CAP) and Oxford Road. Bridge Street has no relevant exposure within 50m and is unsuitable for distance correction. Results for Oxford Road are shown in Table C.10.

Table C.8 – Automatic NO₂ Annualisation Summary (concentrations in µg/m³)

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	TRAF		WIG07	
			Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)
Manchester Piccadilly	100.0	27.0	24.7	1.097	29.7	0.910
Salford Eccles	100.0	18.0	16.5	1.088	20.4	0.881
Wigan Centre	100.0	12.7	10.6	1.201	14.9	0.851
Average (R _a)			1.128		0.881	
Raw Data Annual Mean (M)			11.0		21.7	
Annualised Annual Mean (M x R _a)			12.4		19.1	

Table C.9 – Automatic PM₁₀ Annualisation Summary (concentrations in µg/m³)

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	TRAF	
			Period Mean (P _m)	Ratio (A _m / P _m)
Manchester Piccadilly	100.0	14.8	14.2	1.046
Salford Eccles	100.0	15.6	15.3	1.019
Wigan Centre	100.0	12.0	11.6	1.028
Average (R _a)			1.031	
Raw Data Annual Mean (M)			10.9	
Annualised Annual Mean (M x R _a)			11.2	

Table C.10 – Automatic NO₂ Fall off With Distance (concentrations in µg/m³)

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted)	Background Concentration	Concentration Predicted at Receptor	Comments
Manchester Oxford Road	3	8	44.2	16.9	37.3	Predicted concentration at Receptor within 10% the AQS objective.

Appendix D: Maps of Monitoring Locations and AQMAs

Maps are presented below for each of the 10 Greater Manchester Local Authorities in alphabetical order, showing monitoring locations and their position relative to the 2016 Air Quality Management Area for nitrogen dioxide annual mean.

Further details of the monitoring site locations, including the Clean Air Plan locations, can be found through this [link to the Clean Air GM Website data hub](#).

Greater Manchester AQMA boundaries can be found via [this link to the UK Air AQMAs interactive map](#).

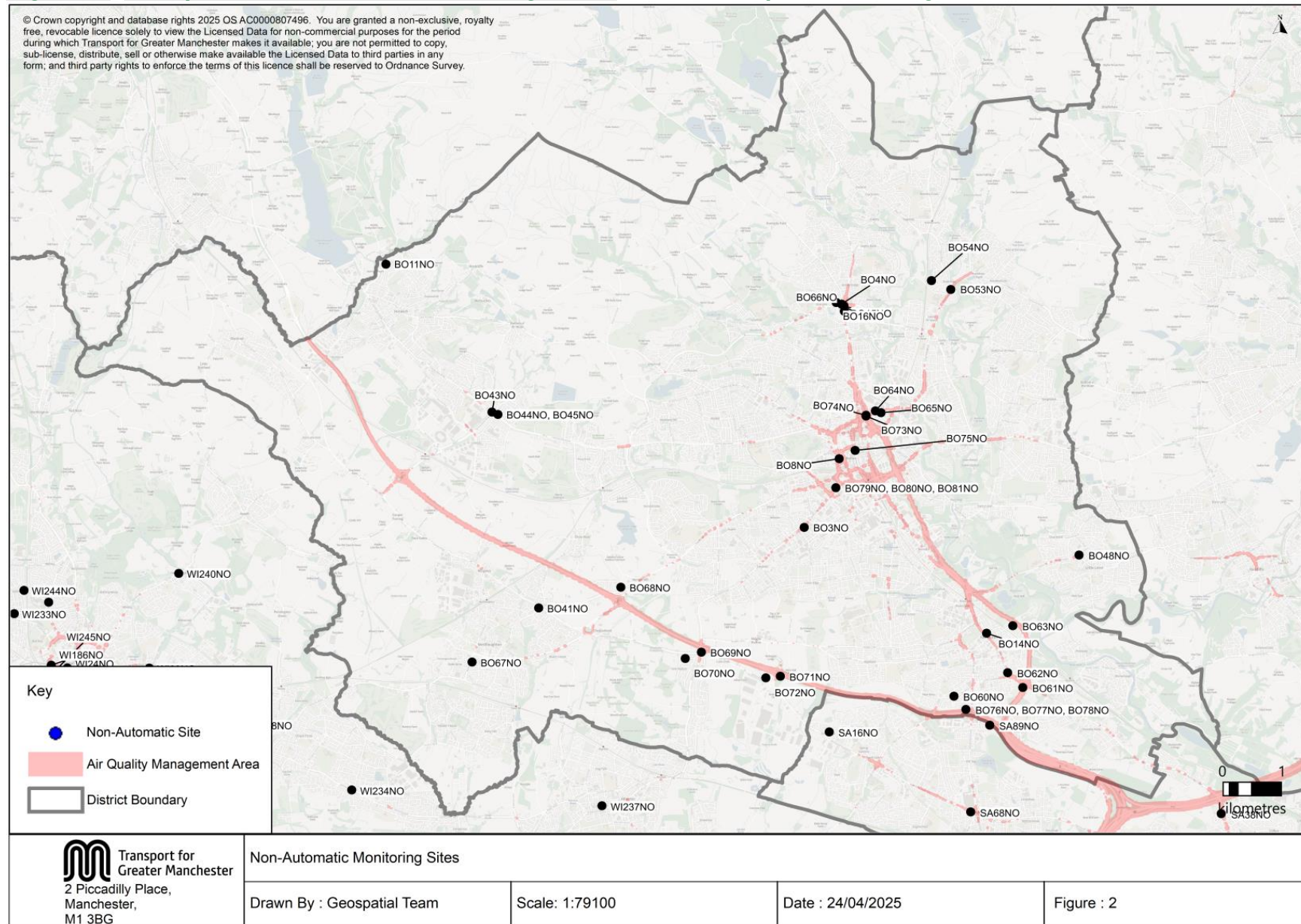
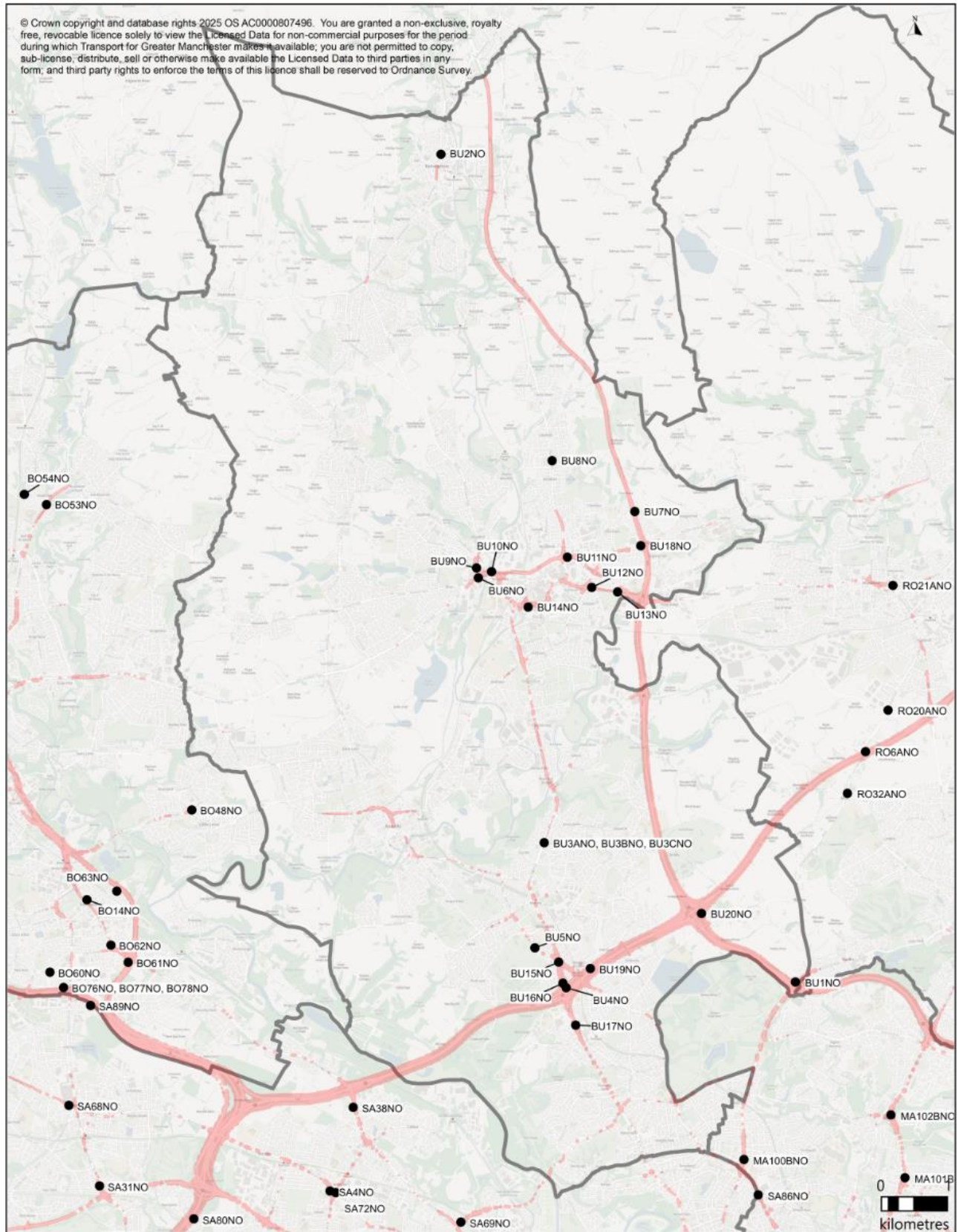
Figure D.1 – Map of Non-Automatic Monitoring Sites, Bolton Metropolitan Borough Council

Figure D.2 – Map of Non-Automatic Monitoring Sites, Bury Metropolitan Borough Council



Non-Automatic Monitoring Sites



Transport for
Greater Manchester
2 Piccadilly Place,
Manchester,
M1 3BG

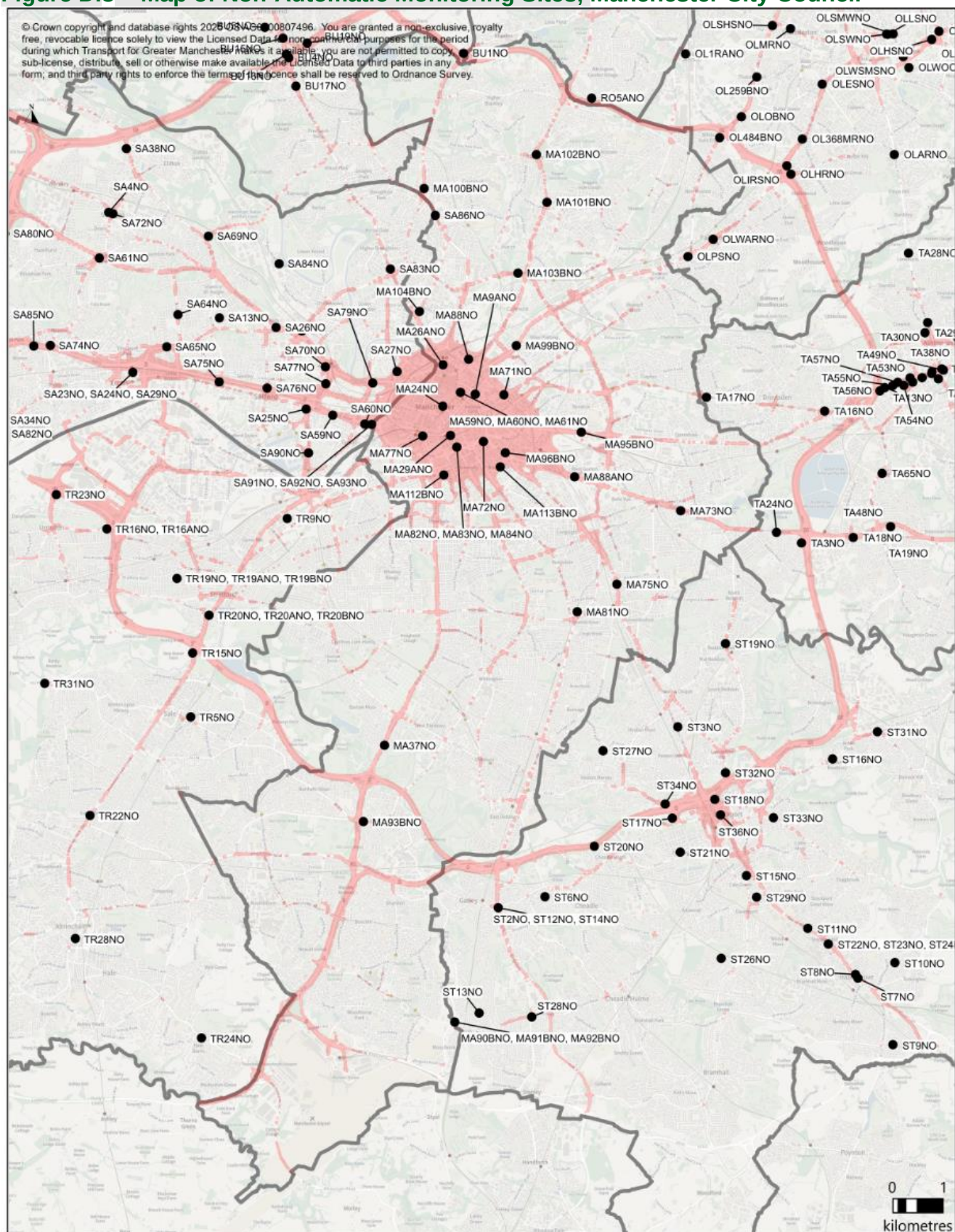
Drawn By : Geospatial Team

Date : 28/04/2025

Scale : 1:71280

Figure : 3

Figure D.3 – Map of Non-Automatic Monitoring Sites, Manchester City Council



Non-Automatic Monitoring Sites		
 Transport for Greater Manchester 2 Piccadilly Place, Manchester, M1 3BG	Drawn By :Geospatial Team	Date : 28/04/2025
	Scale : 1:93460	Figure : 4

Figure D.4 – Map of Non-Automatic Monitoring Sites, Oldham Metropolitan Borough Council

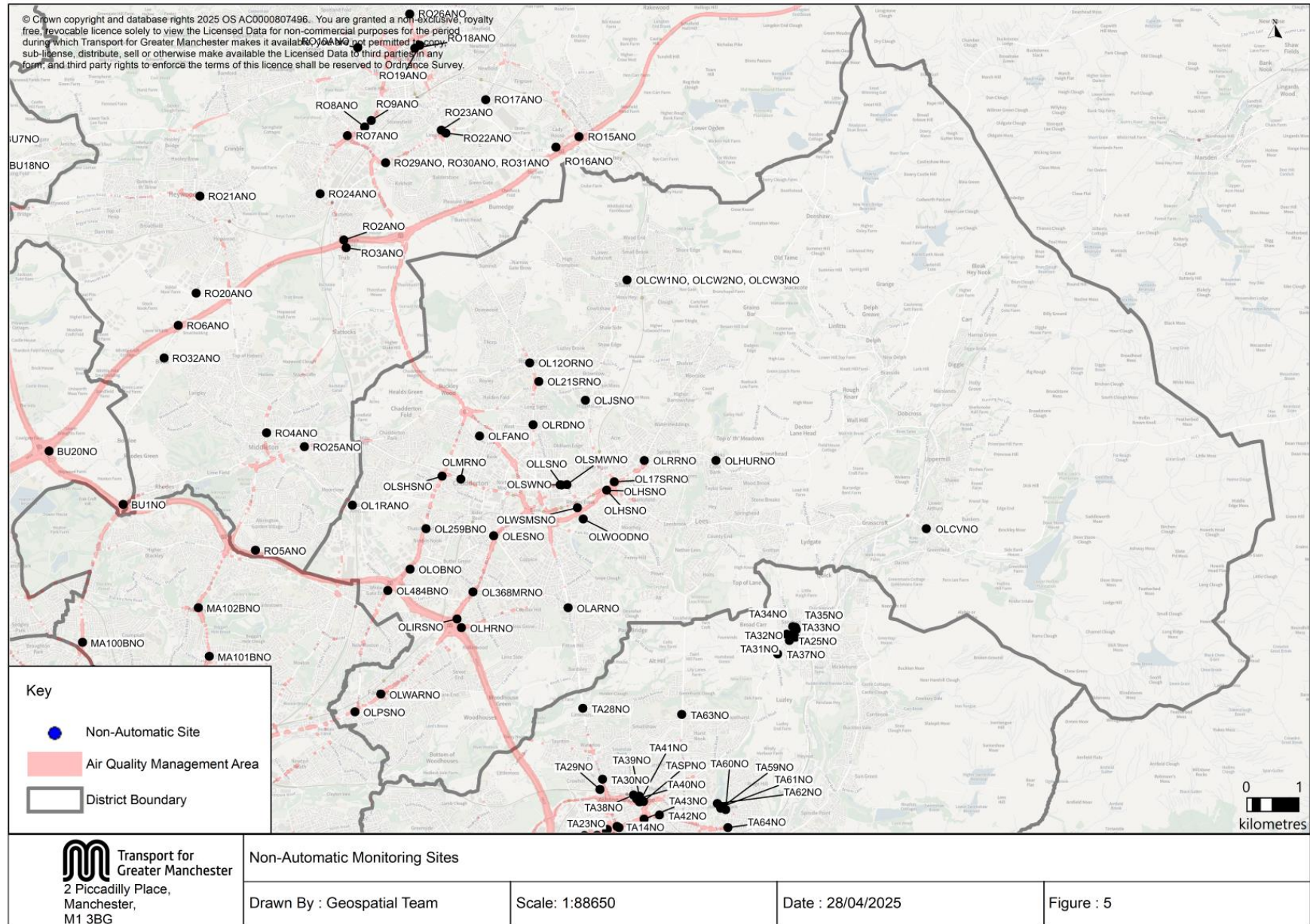


Figure D.5 – Map of Non-Automatic Monitoring Sites, Rochdale Metropolitan Borough Council

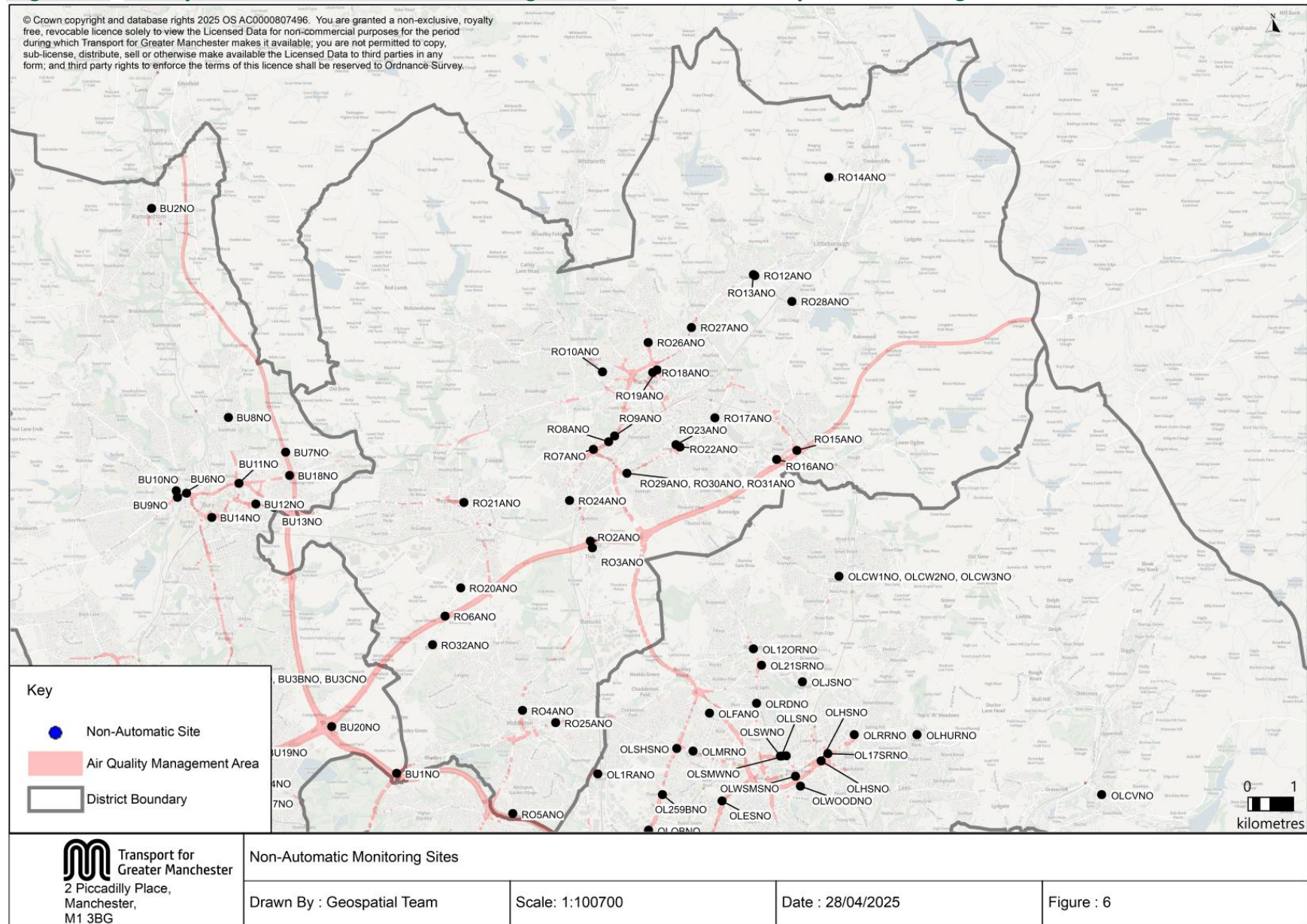


Figure D.6 – Map of Non-Automatic Monitoring Sites, Salford City Council

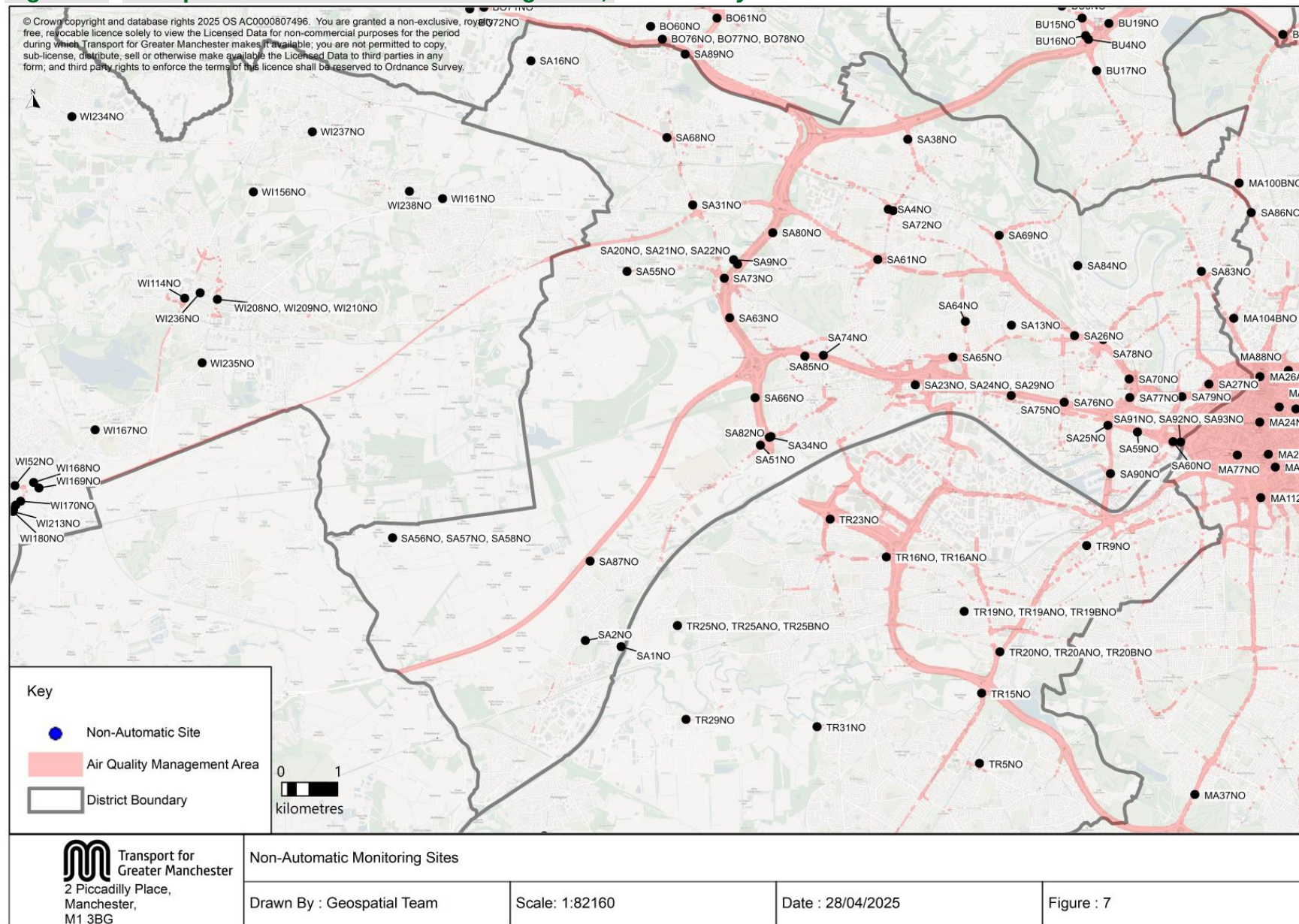


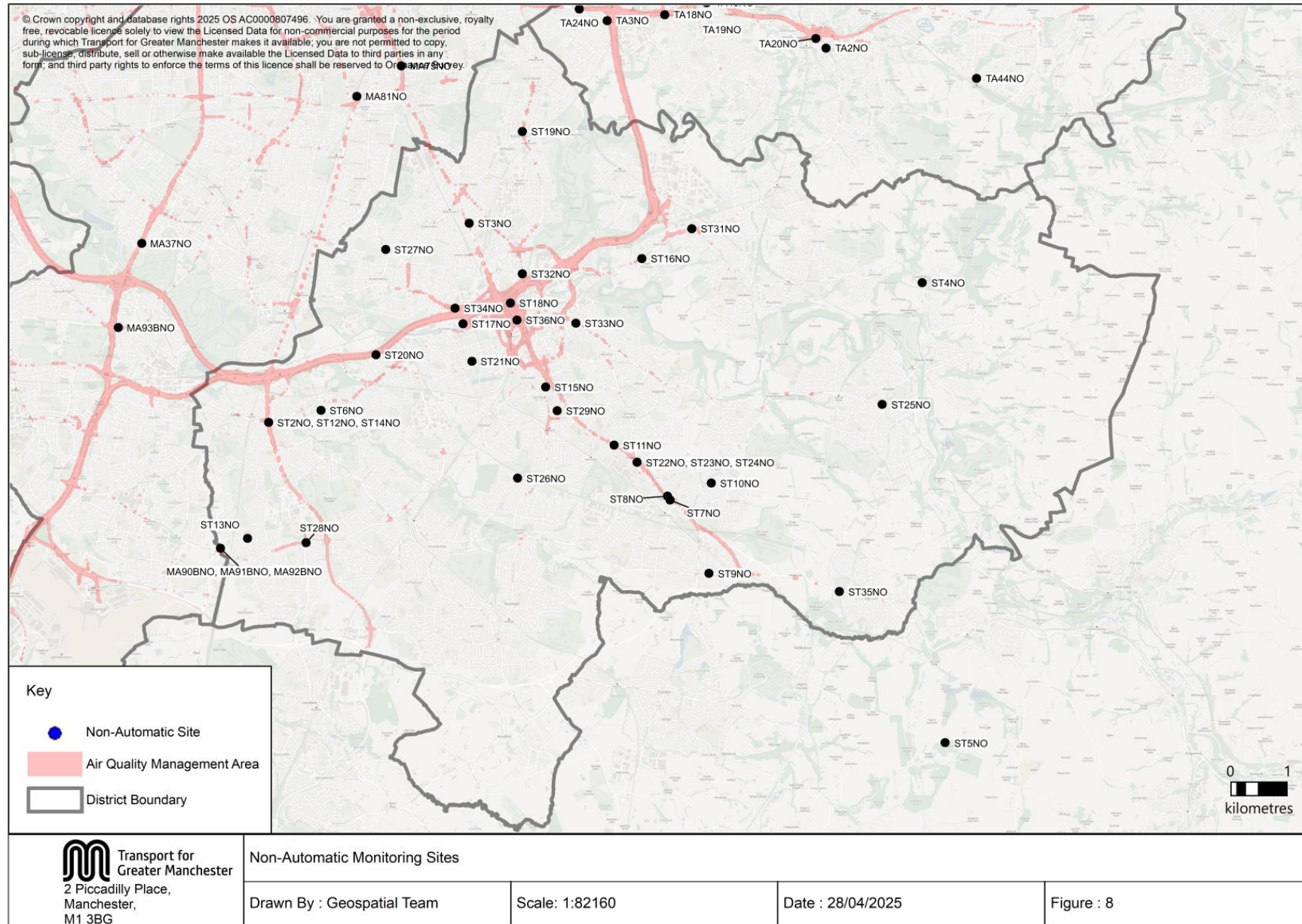
Figure D.7 – Map of Non-Automatic Monitoring Sites, Stockport Metropolitan Borough Council

Figure D.8 – Map of Non-Automatic Monitoring Sites, Tameside Metropolitan Borough Council

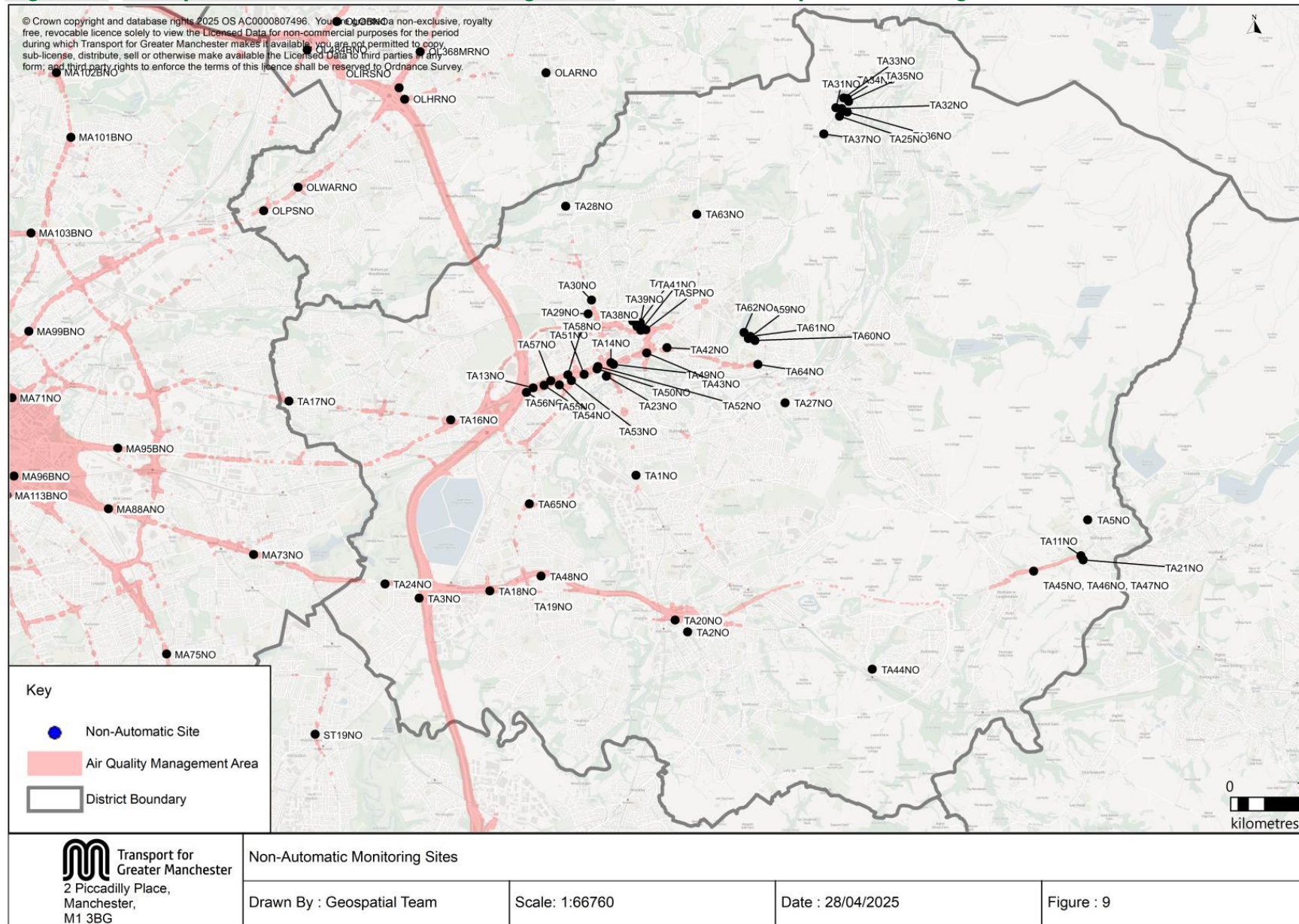


Figure D.9 – Map of Non-Automatic Monitoring Sites, Trafford Metropolitan Borough Council

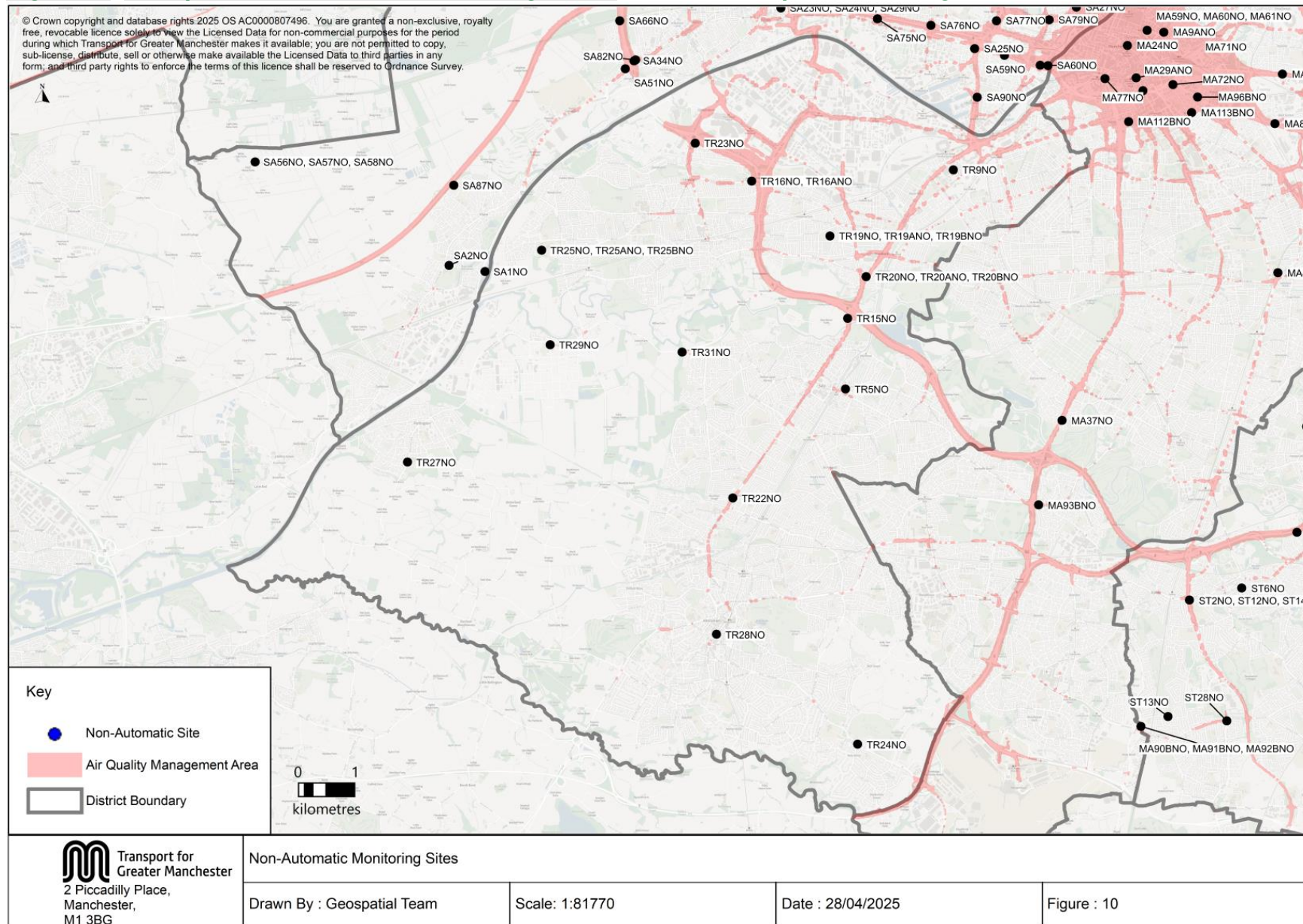
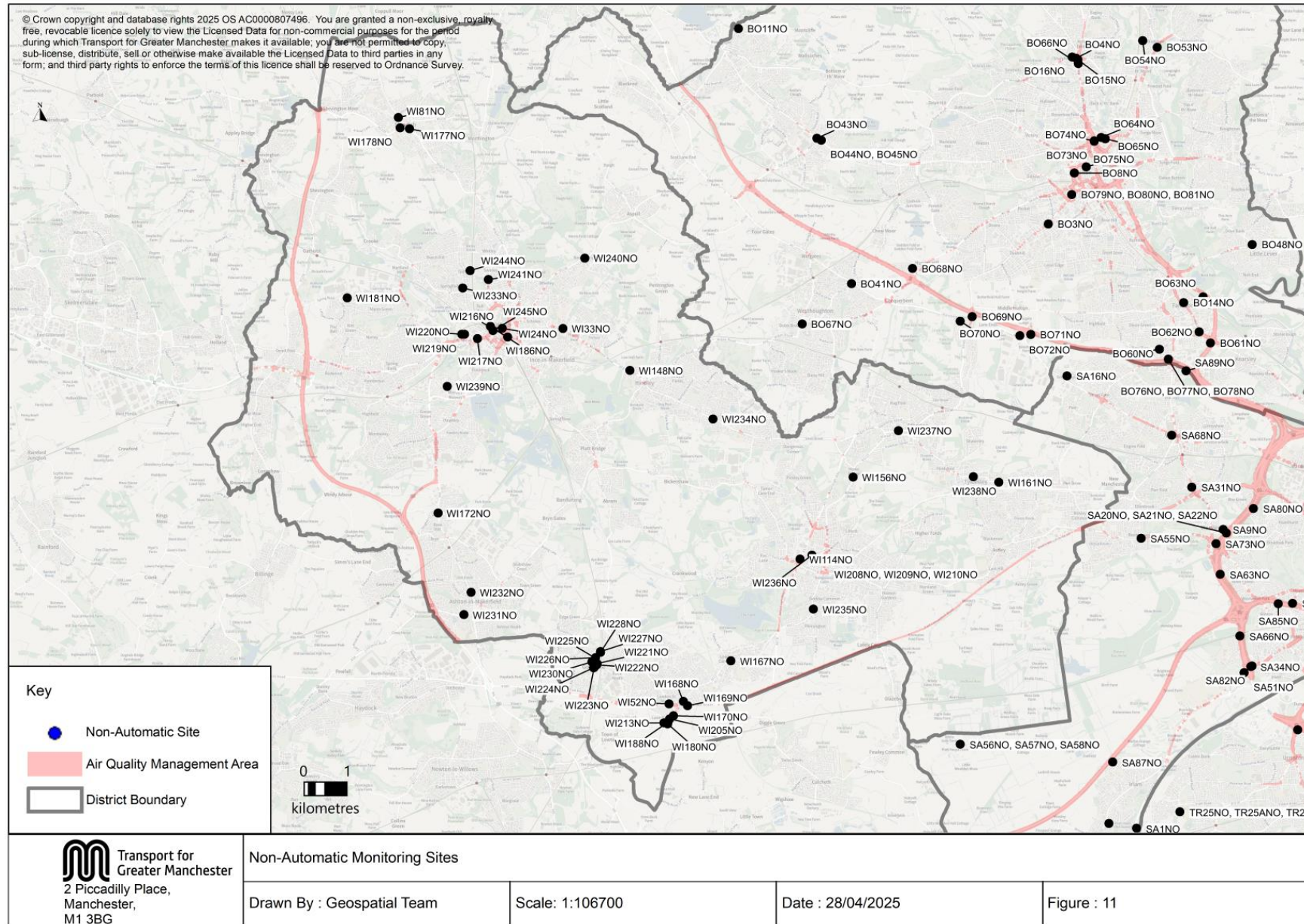


Figure D.10 – Map of Non-Automatic Monitoring Sites, Wigan Metropolitan Borough Council



LAQM Annual Status Report 2024



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England¹⁴

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO ₂)	40 µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM ₁₀)	40 µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO ₂)	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO ₂)	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

¹⁴ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Glossary of Terms

Abbreviation	Description
$\mu\text{g}/\text{m}^3$	A measure of concentration in terms of mass per unit volume. A concentration of $1 \mu\text{g}/\text{m}^3$ means that one cubic metre of air contains one microgram (10^{-6} grams) of pollutant.
AURN	Automatic Urban and Rural Network
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
AQO	Air Quality Objective
ASR	Annual Status Report
BAM	Beta Attenuation Monitors
CAP	Greater Manchester Clean Air Plan
CC	City Council
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
ESU	Equipment Support Unit
FDMS	Filter Dynamics Measurement System
GM	Greater Manchester
GMCA	Greater Manchester Combined Authority
GMAQN	Greater Manchester Air Quality Network
LAQM	Local Air Quality Management
LSO	Local Site Operators
MBC	Metropolitan Borough Council
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
ONS	Office for National Statistics
PM_{10}	Airborne particulate matter with an aerodynamic diameter of $10\mu\text{m}$ or less
$\text{PM}_{2.5}$	Airborne particulate matter with an aerodynamic diameter of $2.5\mu\text{m}$ or less
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide
TfGM	Transport for Greater Manchester
UKHSA	United Kingdom Health Security Agency
WHO	World Health Organisation

References

- Local Air Quality Management Technical Guidance LAQM.TG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
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- Chemical hazards and poisons report: Issue 28. June 2022. Published by UK Health Security Agency
- Air Quality Strategy – Framework for Local Authority Delivery. August 2023. Published by Defra.
- Local Air Quality Management QA QC Framework 'AIR-PT-Rounds 50 to 63 (June 2022 to June 2024)', <https://laqm.defra.gov.uk/wp-content/uploads/2021/02/AIR-PT-Rounds-50-to-63-June-2022-to-June-2024.pdf>
- Local Air Quality Management Precision and Accuracy, <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/precision-and-accuracy>
- Air Quality England, <https://www.airqualityengland.co.uk/>
- Bee active cycling, <https://beeactive.tfgm.com/cycling/>
- Bee Network, containing information referred to in the text, <https://tfgm.com/>
- Clean Air GM, containing information referred to in the text, <https://cleanairgm.com/>
- Cycle to work scheme guidance for employers, <https://www.gov.uk/government/publications/cycle-to-work-scheme-implementation-guidance>
- Five-Year Environment Plan on the Greater Manchester Combined Authority website, <https://www.greatermanchester-ca.gov.uk/what-we-do/environment/five-year-environment-plan/>
- GM electric travel, <https://electrictravel.tfgm.com/>
- GM Burn Better, https://gmgreencity.com/take_action/burn_better_gm/
- National Rail train timetable information, <https://www.nationalrail.co.uk/>
- National Rail offers for rail travel, <https://www.daysoutguide.co.uk/>
- Smoke Control Area map, <https://uk-air.defra.gov.uk/data/sca/>
- UK Air, containing the information referred to in the text, <https://uk-air.defra.gov.uk/>
- World Health Organisation air quality guidelines, <https://www.who.int/publications/i/item/9789240034228>
- Zap Map electric car charging points, <https://www.zap-map.com/live/>

Additional references to specific webpages may be included throughout the text.