



# 2025 Air Quality Annual Status Report (ASR)

## Executive Summary

Date: September 2025

Information	South Gloucestershire Council Details
<b>Local Authority Officer</b>	Sally Radwell (Environmental Health) Simon Guy (Transport Policy) Fionna Vosper & Joanna Goodred (Public Health)
<b>Department</b>	Department for Place
<b>Address</b>	South Gloucestershire Council Department for Place Environmental Protection PO Box 1954 Bristol BS37 0DD
<b>Telephone</b>	01454 868001
<b>E-mail</b>	<a href="mailto:environmental.protection@southglos.gov.uk">environmental.protection@southglos.gov.uk</a>
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## Local Responsibilities and Commitment

The ASR was prepared by South Gloucestershire Council Environmental Protection Team with the support and agreement of the following officers and departments:

Transport Policy (Department for Place)

Public Health and Wellbeing (Department for People)

The ASR has been approved by:

Executive Director of Place (Nigel Riglar), Head of Environmental Health, Trading Standards and Licensing (Shaun Fudge) and Environmental Protection Team Leader (Allison Jay).

The ASR has been signed off by the Director of Public Health (Sarah Weld).

If you have any comments on the ASR, please contact the Environmental Protection Team at:

Address: South Gloucestershire Council, Department for Place, Environmental Protection,  
PO Box 1954, Bristol BS37 0DD

Telephone: 01454 868001

Email: [environmental.protection@southglos.gov.uk](mailto:environmental.protection@southglos.gov.uk)

## Executive Summary: Air Quality in Our Area

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

Air pollution particularly affects 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.

Table ES 1 provides a brief explanation of the key pollutants relevant to Local Air Quality Management and the kind of activities they might arise from.

**Table ES 1 - Description of Key Pollutants**

Pollutant	Description
Nitrogen Dioxide (NO <sub>2</sub> )	Nitrogen dioxide is a gas which is generally emitted from high-temperature combustion processes such as road transport or energy generation.
Sulphur Dioxide (SO <sub>2</sub> )	Sulphur dioxide (SO <sub>2</sub> ) is a corrosive gas which is predominantly produced from the combustion of coal or crude oil.
Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> )	<p>Particulate matter is everything in the air that is not a gas.</p> <p>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.</p> <p>PM<sub>10</sub> refers to particles under 10 micrometres. Fine particulate matter or PM<sub>2.5</sub> are particles under 2.5 micrometres.</p>

## Air Quality in South Gloucestershire

South Gloucestershire lies to the north and east of Bristol with the River Severn to the west and the Cotswold escarpment to the east. The area is a diverse mix of urban and rural areas, which includes major residential, industrial and commercial developments. The major junction of the M4 and M5 motorways (the Almondsbury Interchange) is within South Gloucestershire.

The overall population in South Gloucestershire was recorded as 290,400 in the 2021 Census, which was an increase of 10.5% compared to the 2011 census (262,800)<sup>1</sup>. The latest population estimate for South Gloucestershire is 306,332, based on the 2024 Mid-Year population estimate from the Office of National Statistics (ONS)<sup>2</sup>. In the period from mid-2021 to mid-2024, the population estimate of South Gloucestershire increased by 5.3%. Over this period, South Gloucestershire was among the 20% fastest growing local authority districts in England and Wales population wise. Most of the population lives within the urban areas on the north and east fringes of Bristol and in the towns of Yate and Thornbury, while the remainder live in the villages and more rural areas of South Gloucestershire.

The main pollutant of concern locally is nitrogen dioxide (NO<sub>2</sub>) from road traffic. Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) is also a concern with the main source being domestic wood and coal burning.

### **Air Quality Management Areas**

There are two AQMAs currently declared in South Gloucestershire in relation to previous exceedances of the annual mean objective for nitrogen dioxide (40 µg/m<sup>3</sup>):

- Kingswood – Warmley – from the Bristol/ South Gloucestershire boundary in Kingswood along the A420 to the junction with Goldney Avenue in Warmley.
- Staple Hill – in the centre around the Broad Street/ High Street/ Soundwell Road/ Victoria Street crossroads and the High Street/ Acacia Road/ Pendennis Road crossroads.

Details of the current AQMAs are included in Table 2.1 of the report and maps are available in Appendix D. Further information on the AQMAs is available on the Council website [Air quality | BETA - South Gloucestershire Council \(southglos.gov.uk\)](https://www.southglos.gov.uk/air-quality) and on the Defra UK-AIR website [Local Authority Details - Defra, UK](https://www.gov.uk/government/collections/local-authority-air-quality).

The former Cribbs Causeway AQMA adjacent to the M5 Motorway Junction 17 roundabout was revoked in July 2020 as nitrogen dioxide concentrations within the AQMA had

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<sup>1</sup> [Census | BETA - South Gloucestershire Council \(southglos.gov.uk\)](https://www.southglos.gov.uk/census)

<sup>2</sup> [Population estimates for England and Wales - Office for National Statistics](https://www.gov.uk/government/collections/population-estimates-for-england-and-wales)

consistently been below the annual mean objective since 2010. Further information about the AQMAs is provided in Section 2.1 of the report.

### **Trends in monitored pollutant concentrations**

South Gloucestershire Council carried out automatic (continuous) monitoring at the following three sites during 2024 (the pollutant(s) monitored at each site are shown in brackets):

- Yate Station Road (NO<sub>2</sub> and PM<sub>10</sub>) – a long standing site operational since 2000
- Stoke Gifford A4174 Ring Road near Coldharbour Lane and the University of West England (NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> and Ozone (O<sub>3</sub>)) – began operating in August 2021
- Hambrook A4174 Ring Road (NO<sub>2</sub>) – began operating in April 2022.

The key outcomes from the automatic monitoring in 2024 are:

- NO<sub>2</sub> concentrations were well below the annual mean objective of 40 µg/m<sup>3</sup> and there were no exceedances of the 1-hour objective of 200 µg/m<sup>3</sup> (18 exceedances are allowed annually) so the NO<sub>2</sub> objectives were met at all three automatic sites.
  - The 2024 annual mean NO<sub>2</sub> concentrations were lower in comparison to 2023, with a 7% decrease in the annual mean concentration at Yate (11.5 µg/m<sup>3</sup>), a 6% decrease at Stoke Gifford A4174 (16.8µg/m<sup>3</sup>) and a 10% decrease at Hambrook A4174 (20.2 µg/m<sup>3</sup>). This is similar to the trend observed across the national automatic urban and rural monitoring network (AURN) roadside sites where the average 2024 NO<sub>2</sub> annual mean concentration decreased by 6% from 2023 levels<sup>3</sup>.
  - The Yate annual mean shows a 39% decrease from the pre-pandemic 2019 annual mean of 19 µg/m<sup>3</sup>, which also follows the similar trend across the national AURN roadside sites where the average 2024 NO<sub>2</sub> annual mean concentration was 34% lower than 2019 levels<sup>4</sup>.
  - The long-term trend at Yate shows an overall continuing decline in annual mean NO<sub>2</sub> concentrations over the last decade with concentrations reducing by 52% from 24 µg/m<sup>3</sup> in 2014.

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<sup>3</sup> [Summary - GOV.UK](#)

<sup>4</sup> [Nitrogen dioxide \(NO<sub>2</sub>\) - GOV.UK \(www.gov.uk\)](#)

- PM<sub>10</sub> concentrations were below the annual mean objective of 40 µg/m<sup>3</sup> and met the 24-hour mean objective (50 µg/m<sup>3</sup> not to be exceeded more than 35 times a year) at both the Yate and Stoke Gifford sites.
  - The annual mean PM<sub>10</sub> concentration at Yate was 11.3 µg/m<sup>3</sup> (a 7.5% decrease from 2023 levels) and 16.9 µg/m<sup>3</sup> at Stoke Gifford (a 5.6% decrease compared to 2023).
  - The PM<sub>10</sub> concentrations at Yate since 2020 have remained below the pre-pandemic annual mean of 13 µg/m<sup>3</sup> in 2019. This is similar to the trend in annual mean PM<sub>10</sub> concentrations observed at the national AURN roadside sites<sup>5</sup>, which have remained below pre-2020 levels and generally continued to fall.
  - The long-term trend in annual mean PM<sub>10</sub> concentrations at Yate shows an overall decline since 2014, when the annual mean concentration was 15 µg/m<sup>3</sup>, with a 25% reduction in PM<sub>10</sub> levels during this period.
  - There were 6 exceedances of the 24-hour daily mean at Stoke Gifford, however 35 exceedances are allowed annually so the objective was met. This compares to 1 exceedance of the daily mean in 2023. There were no exceedances of the daily mean at Yate.
- PM<sub>2.5</sub> concentrations monitored at Stoke Gifford were below the annual mean limit of 20 µg/m<sup>3</sup> and the new annual mean concentration target of 10 µg/m<sup>3</sup> to be met by 2040 (and the interim target of 12 µg/m<sup>3</sup> by 2028) introduced under the Environment Act 2021.
  - The annual mean concentration in 2024 was 6.9 µg/m<sup>3</sup> at Stoke Gifford, which is a 9.2% decrease from the 2023 annual mean of 7.6 µg/m<sup>3</sup>. This is larger decrease than the trend observed in annual mean PM<sub>2.5</sub> concentrations at the national AURN roadside sites<sup>6</sup>, which showed a decrease of 3% compared to 2023.
- Ozone (O<sub>3</sub>) concentrations monitored at Stoke Gifford were above the maximum running 8-hour mean objective of 100 µg/m<sup>3</sup> on 9 days during 2024, the same number

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<sup>5</sup> [Particulate matter \(PM<sub>10</sub>/PM<sub>2.5</sub>\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/particulate-matter-pm10-pm25)

<sup>6</sup> [Summary - GOV.UK](https://www.gov.uk/government/consultations/particulate-matter-pm10-pm25)

of days as in 2023. However, the ozone objective (100 µg/m<sup>3</sup> not to be exceeded more than 10 times a year) has an allowance of 10 days so this objective was not exceeded in 2024. The responsibility for meeting this objective sits with national government because of the transboundary nature of ozone but it is useful to monitor ozone as reducing levels of NO<sub>2</sub> are invariably accompanied by an increase in ozone levels. This is of concern due to the health impacts of ozone<sup>7</sup> and because ozone is a greenhouse gas in the lower atmosphere.

There was also extensive monitoring of nitrogen dioxide at 101 non-automatic (passive) diffusion tube monitoring sites which formed a major part of the local air quality management (LAQM) network across South Gloucestershire in 2024.

The key outcomes from the diffusion tube monitoring are:

- NO<sub>2</sub> concentrations were below the annual mean objective of 40 µg/m<sup>3</sup> so there were no exceedances of the objective at any of the LAQM diffusion tube monitoring sites in South Gloucestershire, including in the Kingswood – Warmley and Staple Hill AQMAs.
- The 2024 annual mean NO<sub>2</sub> concentrations decreased by an average of 1.8% across the LAQM diffusion tube sites compared to 2023. This is a smaller reduction than the trend observed across the national automatic urban and rural monitoring network (AURN) roadside sites where the average 2024 NO<sub>2</sub> annual mean concentration decreased by 6% from 2023 levels. Overall since 2019, the NO<sub>2</sub> concentrations across the long-term sites reduced by 35% on average, which compares well to 34% reduction observed across the AURN roadside sites from 2019 levels<sup>8</sup>.
- In the Kingswood – Warmley AQMA, annual mean NO<sub>2</sub> concentrations decreased by an average of 0.7% from 2023 to 2024 so remained relatively stable on average. There were no exceedances of the annual mean NO<sub>2</sub> objective or any “borderline” sites (within 10% of the annual mean objective, so greater than 36 µg/m<sup>3</sup>) in this AQMA. From 2019 to 2024, the NO<sub>2</sub> concentrations reduced by an average of 37% in the AQMA.
- In the Staple Hill AQMA, the average annual mean NO<sub>2</sub> concentrations across the monitoring sites in the AQMA showed no change and remained stable from 2023 to

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<sup>7</sup> [Ozone \(O<sub>3</sub>\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

<sup>8</sup> [Nitrogen dioxide \(NO<sub>2</sub>\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

2024. However, the overall long-term trend has been downward and from 2019 to 2024, the annual mean concentrations have reduced by an average of 34% in the AQMA. There were no exceedances of the annual mean NO<sub>2</sub> objective or any “borderline” sites in this AQMA.

- Across the rest of the district, there were no “borderline” monitoring sites with NO<sub>2</sub> concentrations greater than 36 µg/m<sup>3</sup>. The highest 2024 annual mean NO<sub>2</sub> concentration measured at a South Gloucestershire LAQM diffusion tube site was 30.2 µg/m<sup>3</sup> at site 188 in Patchway on the A38 Gloucester Road near Hayes Way in the north Bristol fringe. However, the nearest house is set back further from the road at this site and as NO<sub>2</sub> levels fall off with increasing distance from the road, the concentration would be lower at the house façade.

The details of the monitoring sites and results are provided in Appendix A. The monitoring results and trends in the data are discussed further in Section 3.2 of the report and trend graphs are available in Appendix A. The monitoring data from the South Gloucestershire automatic sites is available to view on the [Air Quality in the United Kingdom \(ukairquality.net\)](https://www.ukairquality.net) website.

## 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.

South Gloucestershire Council works closely with other neighbouring authorities in the West of England (Bath and North East Somerset, Bristol City and North Somerset Councils), and with the West of England Combined Authority (WECA), to develop, implement and refine schemes with cross-boundary characteristics, particularly in key regional strategic work areas such as transport.

A key regional plan is the West of England Joint Local Transport Plan 4 (JLTP4) 2020 – 2036<sup>9</sup>. One of the five key objectives within the JLTP4 is to “Take action against climate change and address poor air quality” thereby placing a greater emphasis on air quality and climate change in strategic transport planning through to 2036.

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<sup>9</sup> [Joint Local Transport Plan - Combined Authority \(westofengland-ca.gov.uk\)](https://www.westofengland-ca.gov.uk)

Within South Gloucestershire Council itself, the development of a council-wide approach to air quality has brought services which have an interest and/or impact on air quality, including Public Health, Environmental Health, Transport Policy, Environment and Climate Change, Spatial Planning, Development Control, Street Care and Highways and Strategic Communications, together into a Board. The Clean Air and Climate Change Board is co-chaired by the Executive Director for Place and the Director of Public Health. With the Board also covering Climate Change, this ensures there is a joined-up approach across the two work areas, which are closely interlinked with often the same sources and interventions and secures alignment with the Council's Climate Emergency Strategy and Action Plans<sup>10</sup>.

The Clean Air and Climate Change Board has overseen the development of the South Gloucestershire Clean Air Strategy<sup>11</sup>, which was approved by the Council in July 2020. Subsequently, a comprehensive, area-wide draft Clean Air Action Plan (CAAP) has been developed to implement the Clean Air Strategy's visions and priorities and to fulfil the Council's statutory local air quality management duties to update the 2012 Air Quality Action Plan for the Kingswood and Staple Hill AQMAs<sup>12</sup>.

Public Consultation was undertaken on the draft Clean Air Action Plan between 6 December 2022 and 31 January 2023. The consultation sought the views of the public and businesses on a wide range of proposed actions designed to improve air quality within the AQMAs and across South Gloucestershire. Further information, including the draft Clean Air Action Plan itself and a consultation report summarising the responses, is available on the [Clean Air Action Plan - South Gloucestershire Online Consultations \(southglos.gov.uk\)](https://southglos.gov.uk/clean-air-action-plan-south-gloucestershire-online-consultations) webpage. The feedback from the consultation has been considered and has helped shape the final Clean Air Action Plan. Work continues to finalise the draft CAAP with completion of the final CAAP and approval anticipated later in 2025.

During 2024, actions progressed in South Gloucestershire and across the wider West of England region aimed at reducing traffic congestion and improving air quality include:

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<sup>10</sup> [Climate and nature emergency in South Gloucestershire | BETA - South Gloucestershire Council \(southglos.gov.uk\)](https://southglos.gov.uk/climate-and-nature-emergency-in-south-gloucestershire-beta-south-gloucestershire-council)

<sup>11</sup> [SGC Clean Air Strategy 2020-2024 \(southglos.gov.uk\)](https://southglos.gov.uk/sgc-clean-air-strategy-2020-2024)

<sup>12</sup> [2012 Air Quality Action Plan Kingswood and Staple Hill \(southglos.gov.uk\)](https://southglos.gov.uk/2012-air-quality-action-plan-kingswood-and-staple-hill)

- MetroWest<sup>13</sup> – improved rail services and infrastructure being delivered in two phases by the West of England councils, working in partnership with Network Rail and Great Western Railway. In South Gloucestershire, Phase 1 enhanced local passenger train services on the Severn Beach line from 2021. Phase 2 has increased train services between Bristol Temple Meads and Gloucester via Yate to a half-hourly service from May 2023 and proposes to re-open the Henbury Line to an hourly spur passenger service. Plans for new rail stations are progressing with WECA funding. Planning permission for the new rail station at North Filton was granted in January 2023 and for Charfield<sup>14</sup> station in March 2023. Both stations are expected to open in 2027<sup>15</sup>.
- The region continues to develop its bus services with the recent delivery of First/Department for Transport funded electric buses and associated charging infrastructure. By summer of 2026, more than 250 electric buses will be on the road and four of the regions five depots fully electrified, ensuring cleaner air, reduced carbon emissions and quieter streets<sup>16</sup>.
- A38 and Bradley Stoke Way improvements – SGC are developing a scheme along the Thornbury to Bradley Stoke Way corridor to improve conditions for people walking, cycling, and travelling by bus to encourage mode shift to more sustainable forms of transport and improve air quality. Funding was released in 2024 to start construction, and it is expected that the scheme will be fully open by March 2027.
- A432 Yate to A4174 Ring Road Corridor - SGC are developing a similar scheme along this corridor to the above scheme, again to improve conditions for walking, cycling, and travelling by bus to encourage mode shift and improve air quality. Funding was also released in 2024 to start construction, and it is expected that the scheme will be fully open by March 2027.
- SGC has recently secured Green Recovery Funding to expand the rollout of rapid and fast electric vehicle charging points. The aim is to improve charging

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<sup>13</sup> [MetroWest - WEST \(travelwest.info\)](https://travelwest.info)

<sup>14</sup> [Charfield train station | BETA - South Gloucestershire Council \(southglos.gov.uk\)](https://southglos.gov.uk)

<sup>15</sup> [MetroWest - West of England Combined Authority \(westofengland-ca.gov.uk\)](https://westofengland-ca.gov.uk)

<sup>16</sup> [£150 million investment in better buses for the West -](#)

infrastructure coverage and support the transition to zero-emission vehicles across our communities. The focus over the next year will be on installing destination chargers in public car parks near high streets and railway stations to support visitors to these locations and more on-street residential charging hubs will be provided to support residents without off-street parking, to enable overnight charging for those without home charging options.

- SGC are developing plans with local communities for better active travel facilities in Yate and Thornbury ([Have Your Say Today - Getting About In Thornbury - Commonplace](#)). The aim is to make it easier, safer and more attractive to walk, wheel (using a mobility scooter, wheelchair or pushchair) or cycle, especially for local everyday journeys to school or the shops. When implemented, it is expected the measures will make the roads quieter and safer, improve air quality and encourage more people to get active, contributing to improved public health. The schemes are expected to be completed by March 2027.
- SGC continued developing measures to support active travel across the region. There were 29 applications to the Council's ongoing Active Travel Grant scheme, of which 16 organisations were successful. Most successful applicants used their grant for either a pool bicycle or e-bicycle. Participating organisations have reported back that the scheme has led to a reduction in vehicular journeys to and from their sites, reducing their vehicle emissions and carbon emissions.
- SGC also funded cycle training sessions at the University of the West of England (UWE) Frenchay campus. These were open to residents and those working in South Gloucestershire to improve their cycling skills and confidence to encourage more sustainable travel choices. The long-running initiative of free Dr Bike events also continued. Dr Bike, an experienced mechanic, carries out minor repairs and checks to ensure people's bicycles are safe and roadworthy, helping them to get cycling again.
- Kingswood Town Centre Regeneration<sup>17</sup> - WECA funding from the "Love our High Streets" programme enabled investigation into the redevelopment potential of Kingswood Town Centre. Initial proposals focused on the possibility of re-routing traffic and pedestrianising Regent Street, but detailed technical work uncovered

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<sup>17</sup> [Have Your Say Today - Kingswood Regeneration - Commonplace](#)

significant challenges in being able to deliver a suitable diversion route for traffic to enable pedestrianisation, so pedestrianisation is not being pursued any further. Alternative measures continue to be developed to deliver improvements, in consultation with local residents and businesses. During 2024, walking route improvements<sup>18</sup> between Kingswood and Staple Hill were made which included widening pavements and installing a number of new pedestrian crossings.

- The Bristol Clean Air Zone was introduced in November 2022 and as a class D CAZ includes private cars. In the first 12 months of operation, annual NO<sub>2</sub> levels fell by almost 13% on average inside the zone and almost 10% outside of the zone, when compared to the previous 12 months<sup>19</sup>. The Bristol CAZ may have also had a beneficial impact on NO<sub>2</sub> concentrations in South Gloucestershire due to the volume of commuter traffic between Bristol and South Gloucestershire. Further information is available on [Bristol's Clean Air Zone](#) webpages and the [Clean Air for Bristol](#) website<sup>20</sup>. The Government's Vehicle Checker tool can be used to check whether there is a charge to drive any vehicle in any CAZ – [Check your vehicle \(GOV.UK\)](#).

Further information on actions to improve air quality is provided in Section 2.2 of the report. This includes a summary of the A4174 Hambrook Air Quality Scheme that South Gloucestershire Council was legally directed to put in place to reduce roadside nitrogen dioxide levels on the A4174 Ring Road between the A4017 Bromley Heath and M32 Motorway Junction 1 roundabouts to meet the annual mean NO<sub>2</sub> concentration limit (40 µg/m<sup>3</sup>) in the shortest time possible, as set out in the Air Quality Standards Regulations 2010<sup>21</sup>.

It should be noted that the monitoring data for the Hambrook scheme is not reported in the SGC Air Quality Annual Status Reports (ASRs) as it does not come under our Local Air Quality Management (LAQM) duties. It is reported separately to the Government's Joint Air Quality Unit (JAQU). The JAQU assessment of the 2022 and 2023 monitoring data confirmed the 2022 data was not compliant with the annual mean limit of 40 µg/m<sup>3</sup> but that

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<sup>18</sup> [Keep in Touch with Latest News - Kingswood Walking and Cycling Improvements - Commonplace](#)

<sup>19</sup> [Air quality \(bristol.gov.uk\)](#)

<sup>20</sup> [Clean Air for Bristol | Clean air for everyone | Bristol Clean Air Zone](#)

<sup>21</sup> [UK Air Quality Limits - Defra, UK](#)

the 2023 data was compliant. Two consecutive years of monitoring data showing roadside NO<sub>2</sub> concentrations comply with the NO<sub>2</sub> annual mean limit are required to be released from the legal direction. JAQU are currently assessing the 2024 monitoring data and the outcome of this assessment will be published on the scheme webpage - [Hambrook lights – changes to traffic movements | BETA - South Gloucestershire Council \(southglos.gov.uk\)](#).

## Conclusions and Priorities

In 2024, there were no exceedences of the NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> and Ozone (O<sub>3</sub>) pollutant objectives identified at any of the automatic and non-automatic (diffusion tube) monitoring sites in South Gloucestershire, including in the Kingswood – Warmley and Staple Hill AQMAs.

Monitored concentrations of NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> in 2024 all decreased at the automatic sites compared to 2023 levels. The long-term trends at the Yate automatic site show over the past decade, the PM<sub>10</sub> annual mean concentrations have reduced by 25% and the NO<sub>2</sub> annual mean concentrations have reduced by 52%.

The 2024 annual mean NO<sub>2</sub> concentrations decreased by an average of 1.8% across the LAQM diffusion tube sites compared to 2023. Overall since 2019, the NO<sub>2</sub> concentrations across the long-term sites have reduced by 35% on average. Since 2019, the annual mean NO<sub>2</sub> concentrations have decreased by an average of 37% in the Kingswood – Warmley AQMA and by 34% in the Staple Hill AQMA.

The overall reducing trend in NO<sub>2</sub> concentrations since 2019 is likely to be due to the combination of the Covid-19 pandemic restrictions initially and ongoing change in travel behaviour since, along with a cleaner vehicle fleet as newer, cleaner vehicles replace older, more polluting vehicles. The Bristol Clean Air Zone may have also had a beneficial impact on NO<sub>2</sub> concentrations in South Gloucestershire since its introduction in November 2022 due to the volume of commuter traffic between Bristol and South Gloucestershire.

As of 2024, the Staple Hill AQMA has been compliant with the NO<sub>2</sub> annual mean objective of 40 µg/m<sup>3</sup> for 7 years (2018 – 2024 inclusive) and below the borderline level (not within 10% of the annual mean objective, so lower than 36 µg/m<sup>3</sup>) for 5 years (2020 – 2024 inclusive). The duration of compliance supports the proposed revocation of the Staple Hill AQMA and ensures reasonable certainty there would not be further objective exceedences and that below borderline concentrations would be maintained to avoid revoking and having to declare the AQMA again.

Having considered the relevant Defra guidance and also as recommended in the Defra appraisal of SGC's 2024 Air Quality Annual Status Report, it is proposed to revoke the Staple Hill AQMA. Further information on the proposed revocation of the Staple Hill AQMA is provided in Appendix G of the report.

While the Kingswood – Warmley AQMA has been compliant with both the annual mean objective and borderline level for 5 years (2020 – 2024 inclusive), there are currently no plans to consider the revocation of this AQMA as there are major development proposals which could affect the area. The future status of the Kingswood – Warmley AQMA will be reviewed in subsequent annual status reports.

Continuing improvement in air quality beyond compliance across South Gloucestershire is of key importance as there is no clear evidence of a safe level of exposure to particulate matter (PM) or NO<sub>2</sub> below which there is no risk of adverse health impacts, so further reductions of particulate matter and NO<sub>2</sub> concentrations below current targets is likely to bring additional health benefits<sup>22</sup>. This emphasises the need for the new Clean Air Action Plan, which aims to improve air quality across the whole district as well as in any remaining and former AQMAs.

South Gloucestershire Council's priorities for the coming year are to:

- Finalise the Clean Air Action Plan and seek formal approval of the CAAP to enable implementation of the actions to improve air quality across South Gloucestershire as a whole.
- Proceed with the proposed revocation of the Staple Hill Air Quality Management Area following compliance with the annual mean NO<sub>2</sub> objective for seven years.
- Continue to monitor and assess the effectiveness of the JAQU scheme on the A4174 at Hambrook in achieving compliance with the annual mean NO<sub>2</sub> limit value and review as appropriate following any JAQU recommendations.

The principal challenges and barriers to implementation that South Gloucestershire Council anticipates facing are:

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<sup>22</sup> [Air Quality - A guide for directors of public health \(defra.gov.uk\)](https://www.defra.gov.uk/air-quality-guidance/)

- Significant continued pressure on local government funding, exacerbated by inflationary pressures, could impact the delivery of air quality improvements and also funding and resources to implement the final Clean Air Action Plan measures.
- Many organisations have continued to offer flexible working arrangements to their staff, including the ability to work from home for all or part of their contracted hours. This has helped reduce the pressures on the highway network, however, the acceleration in the popularity of home delivery services has increased the number of delivery vehicles on the road. Continuing uncertainties and changes in travel behaviour make future transport trends harder to predict and understand how air quality will be affected.
- The increasing adoption of electric vehicles remains constrained by high initial costs and the need for continued improvement in the reliability and accessibility of charging infrastructure<sup>23</sup>. These barriers will need to be overcome to ensure continued reductions in vehicle exhaust emissions and achieve the UK's net zero carbon emissions target by 2050.

## How to get Involved

Some local engagement was carried out through the public consultation on our draft Clean Air Action Plan. One of the questions asked in the consultation survey was “How concerned are you about air quality in South Gloucestershire?”. Just over half (55%) of the people who responded to this question said they were concerned about air quality. However, the number of people who responded was relatively small (115 people) considering the population of South Gloucestershire. Continuing to raise awareness and understanding of the impacts of air pollution on health is a key focus and measures to address this are included in the new Clean Air Action Plan.

### What can you do to reduce air pollution?

There are many ways that everyone can help contribute towards improving air quality in South Gloucestershire. By making informed personal choices, particularly around how we travel and heat our homes, we can all reduce our personal contribution to air pollution and help improve air quality and improve our own health in the process.

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<sup>23</sup> [Electric vehicles and infrastructure - House of Commons Library \(parliament.uk\)](#)

To reduce pollution when travelling:

- Swap some trips in the car for walking, cycling or taking a bus or train, where possible, as this not only reduces air pollution but also, if walking and cycling, improves your health and wellbeing.
- Consider sharing lifts which will save you money on fuel as well as reducing the number of cars on the road.
- Travel outside peak hours and/or work from home, if possible, to save time spent in traffic and use less fuel, reducing emissions while saving time and money.
- If you are thinking of changing your vehicle, try switching to a less polluting type of vehicle and opt for the cleanest vehicle you feasibly can. Electric vehicles have the lowest emissions and older diesels tend to have the highest emissions. You can check the emissions of a vehicle you are considering purchasing using the Government's [Get vehicle information from DVLA - GOV.UK](#) website.
- Visit the [West](#)<sup>24</sup> travel information website and the [Better by Bike](#)<sup>25</sup> website for live information on public transport, traffic reports, routes and journey planning for walkers and cyclists and other information that simplifies travel choices.

To help reduce pollution from domestic heating:

- From an air quality perspective, if a property does not already have a solid fuel burner, e.g. a stove or fireplace, the best option is not to install one. Even the cleanest wood burning appliance emits significantly more particulate matter pollution than a gas appliance.
- If you already own a stove or fireplace and choose to use it, make sure you use the right fuels in the right way to help reduce the amount of fine particulate matter the stove or open fire emits, and reduce the negative impacts on health. Further information is available on the Defra [Burn Better, Breathe Better](#) website. Some of South Gloucestershire is covered by a [Smoke Control Area](#) which allows only approved appliances and fuels to be used.

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<sup>24</sup> [Homepage - WEST \(travelwest.info\)](#)

<sup>25</sup> [Homepage - Better By Bike](#)

- Consider installing “clean” renewable energy generation, for example, solar photovoltaics or an air source or ground source heat pump.

There are choices that we can all make to reduce air pollution. Relatively small changes all add up and can make a big difference overall if everyone contributes. Further information is available on our website – [Air quality | BETA - South Gloucestershire Council](https://www.southglos.gov.uk/air-quality/beta) ([southglos.gov.uk](https://www.southglos.gov.uk))