

Consultation Booklet



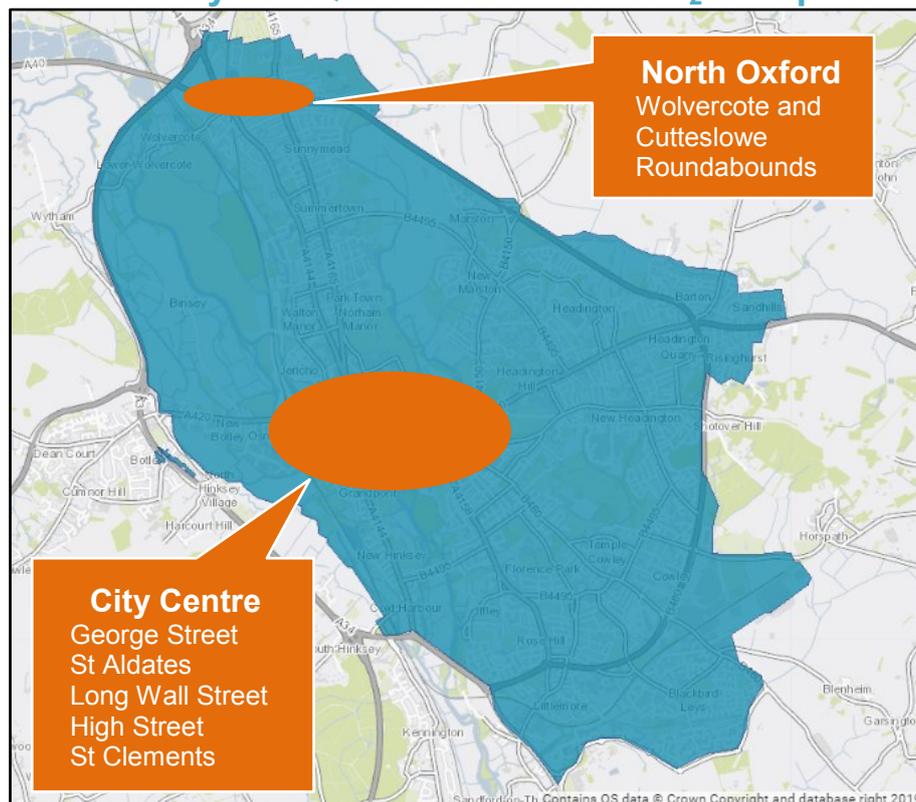
Draft Air Quality Action Plan (2021-2025)

Why produce an Air Quality Action Plan?

Oxford City Council has a statutory duty to review and assess air quality against national air quality standards and legal limits. If an air quality legal limit is not likely to be met an Air Quality Management Area (AQMA) must be declared for the relevant pollutant.

Oxford City Council has declared an AQMA covering the whole of Oxford, including a number of hot-spots where air quality fails to meet the annual mean legal limit for the pollutant nitrogen dioxide (NO₂).

Figure 1 – Boundary of AQMA and historic NO₂ Hotspot locations



Where a local authority has declared an AQMA it is required to develop an Air Quality Action Plan (AQAP) with the aim of improving air quality within the area by reducing levels of pollutants of concern.

In Oxford the main pollutant of concern is NO₂ as we see continued breaches of legal limits. Particulate matters (called PM₁₀ and PM_{2.5}) are also of concern in the city, but for these pollutants the city is compliant with both legal and voluntary World Health Organisation limits.

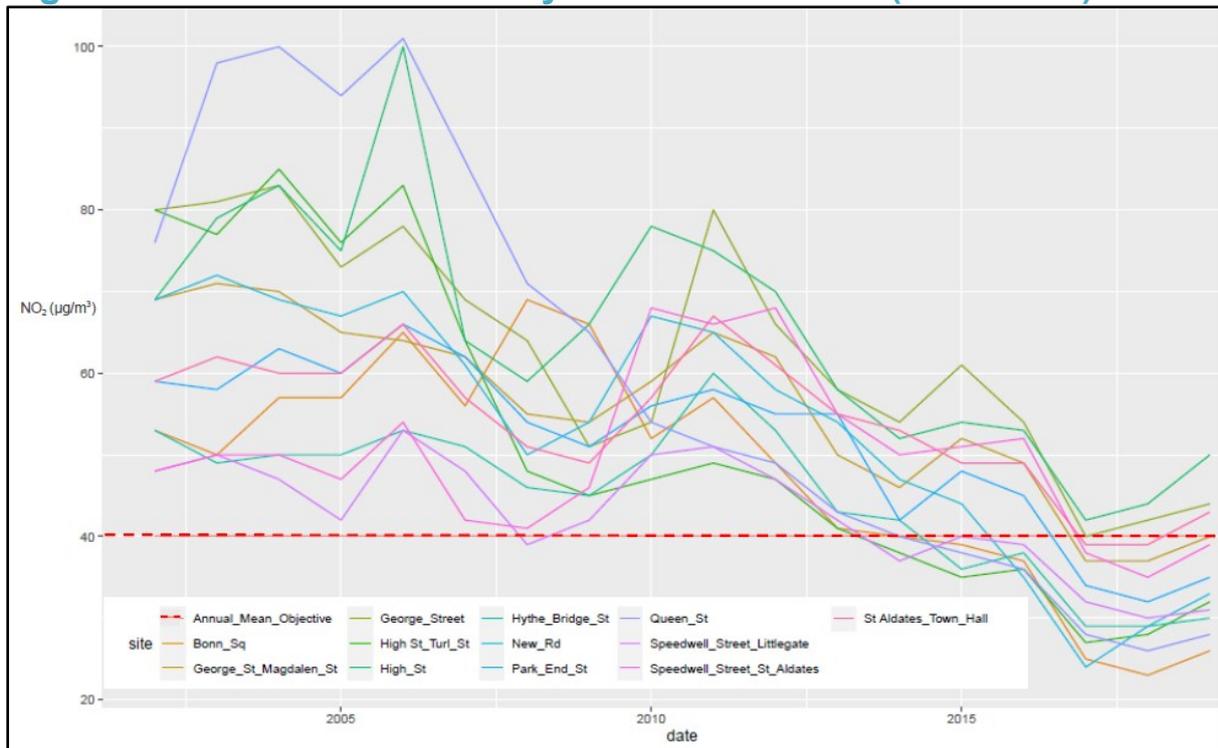
This draft AQAP proposes actions to improve the air quality in Oxford for the period 2021 to 2025, succeeding the previous AQAP (2013-2020).

What are the recent trends in Air Quality?

The chart below shows recent trends in air quality (NO₂) measured in central Oxford. It shows an overall picture of improving air quality; since the implementation of the city's last AQAP in 2013 we have seen a decline of 26% in NO₂ levels in the places where air quality is being monitored. However in recent years we are seeing a plateauing of air quality levels which is of concern.

This is a clear indication that more action on air quality is required to continue to bring those levels down. We need to ensure that air quality levels continue to reduce significantly throughout the city, and that Oxford's air is not just cleaner, but safer to breathe.

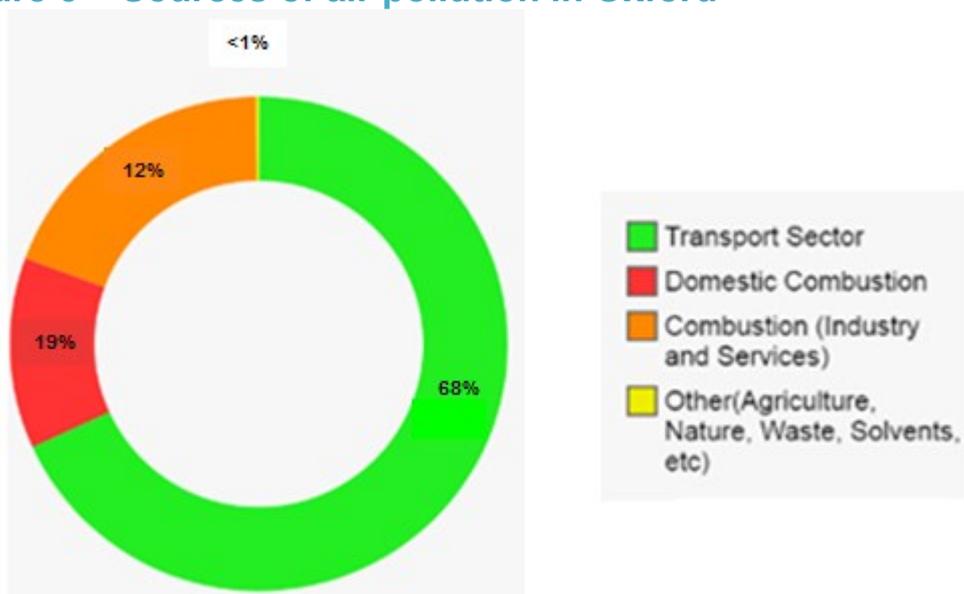
Figure 2 – Trends in Air Quality in Central Oxford (2003-2019)



What's causing the problem?

Oxford's air pollution is a result of a complex mixture of emissions from a range of sources.

Figure 3 – Sources of air pollution in Oxford



According to the latest [Source Apportionment](#) study, the transport sector in Oxford continues to be by far the largest contributor to total NOx emissions in the city. This sector alone is responsible for 68% of total NOx emissions, followed by domestic combustion (19%), Combustion from Industry and Services (12%) and Others: waste, agriculture, solvents, nature (<1%).

How serious is the problem?

Air pollution can cause, complicate, or exacerbate many adverse health conditions. Nitrogen Dioxide (NO₂) and Particulate Matter (PM) are currently the pollutants of most concern for human health. Long term exposure to these pollutants can lead to respiratory or cardiac symptoms, which can ultimately lead to chronic health issues. [Recent studies](#) show that poor air quality can affect every organ in the body, and even cause damage to [cognitive performance](#). Exposure to poor air quality is directly related to diseases such as [cancer](#), [asthma](#), [stroke](#), [heart disease](#), [diabetes](#), [obesity](#), and [dementia](#).

Figure 4 – Air Pollution Effects

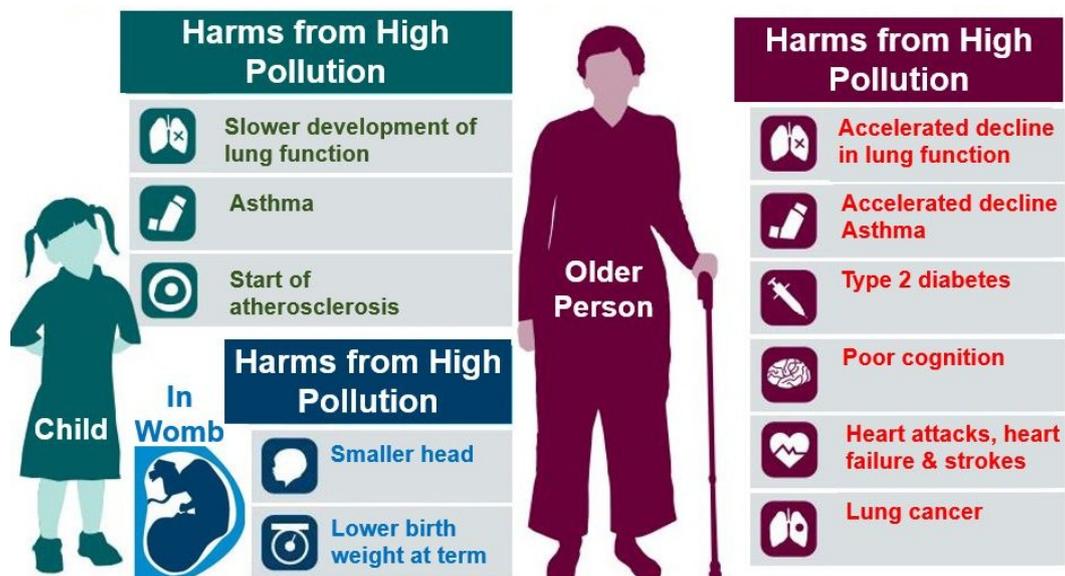


Image: Royal College of Physicians

According to the [World Health Organisation \(WHO\)](#), air pollution kills an estimated 8 million people worldwide every year. 4.2 million deaths are attributed to exposure to outdoor air pollution and 3.8 million to indoor air pollution. Currently 9 out of 10 people in the world breathe air containing health impacting levels of pollutants.

Is the problem the same in all areas of the city?

High traffic levels and congestion, alongside poor street layout contribute to high air pollution levels in cities. Traffic generates emissions, and street layout can interfere with air pollutant dispersion which results in pollutants to concentrate and getting 'trapped' in certain areas. Both factors vary significantly between locations and air pollution levels and human exposure to air pollution are therefore highly dependent on location.

Areas are of concern where we see both high levels of air pollution and people likely to be exposed to the pollution.

We see this in Oxford where certain parts of the city continue to have NO₂ levels above legal limits. Data from our most recent air quality monitoring work (2019) shows that we still have exceedances of the NO₂ annual mean limit value at six locations in the city: St. Clements Street/The Plain, St Clements Street East, George Street, St Aldates, High Street, and Long Wall Street.

What does this new AQAP commit to?

This AQAP reflects our commitment to tackling air pollution by setting out a new local target for NO₂. This target is much lower than the legally binding target set by national government and World Health Organisation recommended guidelines. Our local target has been introduced in order to drive the reduction of air quality locally so that we can protect health.

Table 1 – Summary of UK’s legal Air Quality Objectives vs. World Health Organisation guidelines and Oxford’s local target

Pollutant	UK AQ Objective/ EU Limit value		WHO Guidelines	Oxford’s local target
	Concentration (µg/m ³)	Measured as	Concentration (µg/m ³)	Concentration (µg/m ³)
NO ₂	200	1-hour mean	200	N/A
	40	Annual mean	40	30
PM ₁₀	50	24-hour mean	50	N/A
	40	Annual mean	20	N/A
PM _{2.5}	25	Annual Mean	10	N/A

It is the first time a local authority has set a lower limit for NO₂ to be achieved in an AQAP and we believe it is right to lead the way to cleaner air.

The legal level for NO₂ is 40 µg/m³; however research shows that this level is not a safe level of air quality. Several [studies](#) now show that the harmful effects of air pollution are seen below legal levels of air quality. The overall objectives of this new AQAP for the whole of the Oxford City area are therefore to:

Achieve the legal annual mean NO₂ of 40 µg/m³

**Achieve a local annual mean NO₂ target of 30 µg/m³
by 2025**

What are the key areas of intervention of the new AQAP?

Key areas of Intervention	
1	Developing partnerships and public education
2	Support for the uptake of low and zero emission vehicles
3	Reducing emissions from domestic heating, industry and services
4	Reduce the need to travel, explore opportunities for mode shift and increase the uptake of sustainable transport

The draft AQAP proposes 30 actions to tackle air pollution over the next 5 years. The delivery of actions require partnership with a range of people and organisations. The draft AQAP sets out the draft list of actions and delivery partners.

How does this link to other policies and schemes?

Oxford City Council's main priorities for the period 2021-2025 are focused on the reduction of transport emissions. These priorities concern the delivery of two major schemes: [Oxford's Zero Emission Zone \(ZEZ\)](#) and [Connecting Oxford](#). The first seeks to reduce emissions from vehicles in parts of the city, while the second seeks to reduce the number of private cars on our roads.

This AQAP is therefore fully aligned with [Oxford's Local Plan 2016-2036](#) and with Oxfordshire's [Local Transport Plan](#). It is also aligned with the findings of the [Citizen's Assembly](#) on Climate Change and this Council's response in December 2019.

It is believed that by supporting and building upon existing proposals, tangible improvements in air quality can be achieved more quickly at scale.

What Can You Do?

We would like to hear from you. What do you think about these proposals? Do you think there are other options that could contribute to improving the air quality in Oxford?

Electronic copies of the draft action plan, booklet and questionnaire are available [here](#)

Please complete the online survey by the 1st November 2020 (23h59).

If you wish to complete the survey in paper format please contact us via airquality@oxford.gov.uk to request a copy.