

OUR PLAN - WHY WE HAVE DESIGNED IT THIS WAY



Preface from the Administration

It's About You and Your Family's Health

This Council places the utmost importance on improving air quality for all our residents. Thanks to our combined efforts, air quality in the borough has already improved a lot. We recognise the considerable effort and investment our community has made to achieve these improvements. This includes your investments in over 5,100 electric and ultra-low emission vehicles since 2014, as well as the increasing walking, cycling and public transport use instead of cars. We are immensely grateful for these efforts and the improvements they have brought.

Despite these improvements, air pollution is still ranked as the third preventable cause of mortality in Richmond (Health & Wellbeing Partners, LB Richmond upon Thames, 2019) as well as contributing to many other diseases, from strokes and heart failure to asthma and cardio obstructive pulmonary disease. This is partly because UK Governments have repeatedly set unambitious targets for air pollution in the UK. Meanwhile our EU neighbours have adopted the WHO's ambitious and progressive approach to air pollution improvement. We have set the same ambitious objectives for the borough. And will take the same approach, tightening standards progressively as each target is achieved. This is because we recognise the very serious effects even small amounts of air pollution have on our health. Something we have not seen from recent Governments.

Setting ambitious targets is not enough; we need ambitious action. Our strategy has two pillars:

- Use data to identify the groups of people, places and services that need the most improvement or will benefit the most or need the most protection. For example the children or residents most vulnerable to air pollution, or the locations where people are most exposed.
- Take action that improves more than just air quality. Our work will make our streets nicer places to spend time. It will help people to manage health conditions, enjoy the outside more and have better homes to live in.

These actions are designed to benefit air quality, businesses, visitors and residents alike. They will transform our major town centres. Key streets will have better layouts. Footpaths will be improved as will cycle paths, bike storage for all types of bikes, bike hire schemes and EV charging points will be added. And they will enable you to make your street safer for children to play or run local events to enjoy safe streets and clean air. Local restaurants and shops will find it easier to run festivals that showcase their offerings.



Our focus is on you, your health, and the wellbeing of our community. This plan is not about implausible efforts to do the impossible. We have adopted a practical approach, identifying areas where the Council can lead by example or take direct actions to improve air quality. We have been guided by the science to improve the quality of life and life expectancy of everyone. And we will help residents to protect themselves, reduce their emissions and improve their quality of life. As climate change and air quality have common sources, they are most effectively tackled together. And so we have made our climate change, air quality and health improvement programmes work together.

We cannot do this alone. Many critical decisions rest with Central Government, including of policy, taxes and incentives, and with the Mayor of London. Almost all of our actions are dependent on funding from Central Government or the Greater London Authority, especially where new active travel and sustainable transport schemes are concerned.

Unfortunately, many decisions by recent Governments have been counterproductive.

Postponing car electrification to 2035 against the wishes of the UK car industry, using outdated air pollution objectives, and delaying the introduction of home energy-saving measures. Both the Government and the Mayor of London need to do more. Many of these measures also tackle climate change which also harms health. So we will continue to press them to do more, as well as actively challenge and press neighbouring boroughs, National Highways, the NHS and others to enhance their air quality efforts. We especially need more action from TfL to electrify the bus services passing through our town centres and to ensure buses are frequent, without long waits.

We will always be transparent and accountable about progress, both on our own actions and those of others. By the end of our plan our town centres and many streets will be transformed or significantly improved. Air quality will be improved and they'll be better, healthier places for residents to enjoy and businesses to flourish. We will have reduced air pollution across the borough and at key exposure sites. Your health and that of your family and other residents will be better.



Councillor Piers Allen
Chair of the Health and Wellbeing Board



Councillor Alexander Ehmann
Chair of the Transport and Air Quality Services Committee



Councillor Julia Neden-Watts
Chair of the Environment, Sustainability, Culture and Sports Services Committee

Preface from the Director of Public Health

Clean air is crucial for our wellbeing and our environment. It has wellbeing benefits by protecting our health and helps to combat climate change by reducing harmful emissions. Both air pollution and climate change were identified as key environmental health hazards in our consultations as we developed our Joint Local Health and Wellbeing Strategy (2024–29) titled “18 Steps to Health and Wellbeing”. Steps 11 and 12 focus on climate change and air pollution. A key focus is on reducing air pollution and greenhouse gas emissions for the borough to Net Zero by 2043 or earlier, and greater engagement of vulnerable groups.



A Prevention Framework has been developed and embedded in the Health and Wellbeing Strategy. This highlights the need to address health inequalities and represents the Council’s commitment to embedding prevention in all policies and strategies at three interconnecting levels – people, community, and environment. This includes tackling poor air quality in the borough and health-promoting environments.

The evidence linking air pollution to health impacts is substantial. Epidemiological studies have shown that long-term exposure (over years) to air pollution reduces life expectancy, mainly due to cardiovascular and respiratory diseases and lung cancer. Short-term exposure (over hours or days) to elevated levels of air pollution can also cause a range of health impacts, including effects on lung function, exacerbation of asthma, increases in respiratory and cardiovascular hospital admissions and mortality.

It is crucial to raise awareness and take collective action to improve air quality and protect public health. Outdoor air pollution levels in some parts of our borough still exceeds the Government air quality objective levels well as WHO guidelines, and therefore action is still needed to tackle poor air quality. Air pollution comes from a range of sources including transport and domestic heating for example, however other pollutants originate outside the borough such as from Heathrow Airport or further afield.

Two pollutants are of particular concern for health, NO₂ and PM pollution. The former comes mainly from combustion in vehicles and domestic gas heating. NO₂ can cause inflammation of the airways, reduce lung function and contribute to asthma attacks. PM can be produced by a range of activities for example by wood burning, tyre and brake wear from vehicles, demolition, and other sources. Due to the small size of the particles (smaller than the width of a human hair) which form these pollutants, they can enter the bloodstream and can be transported around the body, lodging in the heart, brain, and other organs.

People more likely to be affected include older people, children, individuals with existing cardiovascular or respiratory disease, pregnant women, and people living in or near our town centres as well as those close to busy roads. Air pollution is not only an outdoor issue however, the health dangers of indoor air pollution are also of concern.

Pollutants from dust, cooking, cleaning products, air fresheners, cigarette smoke and vaping can all be harmful to health.

While progress has been made to meet UK guidelines, further work needs to be undertaken to meet WHO guidance levels. More work must be undertaken including targeting of deprived communities in pollution hotspot areas as well as settings considered vulnerable such as schools, children centres, health and community centres. There is a strong desire to see continued local action to help tackle and enable borough residents to lead healthier lives and this new Air Quality Action Plan will facilitate this.

Shannon Katiyo
Director of Public Health
London Borough of Richmond upon Thames



Introduction: The Present Situation and Goals for this Plan

Air quality in the borough has improved greatly in recent years. In 2016, the annual average Nitrogen Dioxide (NO₂) air pollution exceeded the UK Government’s air pollution target at 41 locations in the borough. By 2023, that was down to two locations (see Appendix A for details). Particulate Matter (PM) pollution has also greatly improved, as shown in Figure 1. This is a result of all our efforts, including the increases in walking, cycling and use of public transport, School Streets, and the investments in electric cars and vans by over 5,000 local residents and businesses, as well as wider policies like London’s ULEZ. Nonetheless air pollution remains the 3rd main cause of preventable cause of disease and death in the borough.

The Council wants to reduce this burden of disease on you and your family. We are setting goals we are confident can be achieved without excessive cost or inconvenience, working in cooperation with you, local businesses, schools and the NHS, and partners like TfL.

To that end, we have set a goal for air quality in the Borough that is more ambitious than the out-of-date UK targets set by recent Governments. This is based on the medical advice provided by the WHO. We are following their recommendation of gradually strengthening our objectives as previous targets are achieved.

Given that current annual NO₂ levels in the borough are mostly in the range of 20-30µg/m³ our goal is to

reduce this to below 20µg/m³ at all measurement sites in the borough by the end of this Plan (see Table 1). This is in addition to the Mayor of London’s policy of reducing PM_{2.5} annual averages in London to below 10µg/m³ everywhere in London. Both are more ambitious than the UK objectives.

We present our plan over several sections.

The section Priority Locations and Groups sets out the locations, groups of people and types of places that we want to specially prioritise. These are places where the general population get higher exposure to higher air pollution. And these are groups of people, such as school children or people with asthma, and types of places, such as schools or areas with relative deprivation, where taking action will have a disproportionate benefit, such as preventing damage for life to children’s health. This obviously also includes an ethical dimension – it is right to ensure we are protecting the most vulnerable.

The section Areas of Thematic Action describes the actions we will take in thematic terms, such as transport, walking and cycling, or tackling climate change and air quality together. These actions cut across the priorities, though some are specially targeted. But many will have wider general benefits to all residents, like bus electrification or energy efficiency. And we will continue our work, ongoing since the early 1990s, to ensure the Borough has one of the most effective air quality monitoring networks in the country, enabling us to make well informed decisions.

In the Appendices we set out in detail our rationale for these choices, the data analysis we have completed, the medical science of the WHO guidelines, and detail the KPIs we’ll use to measure ourselves on this plan.

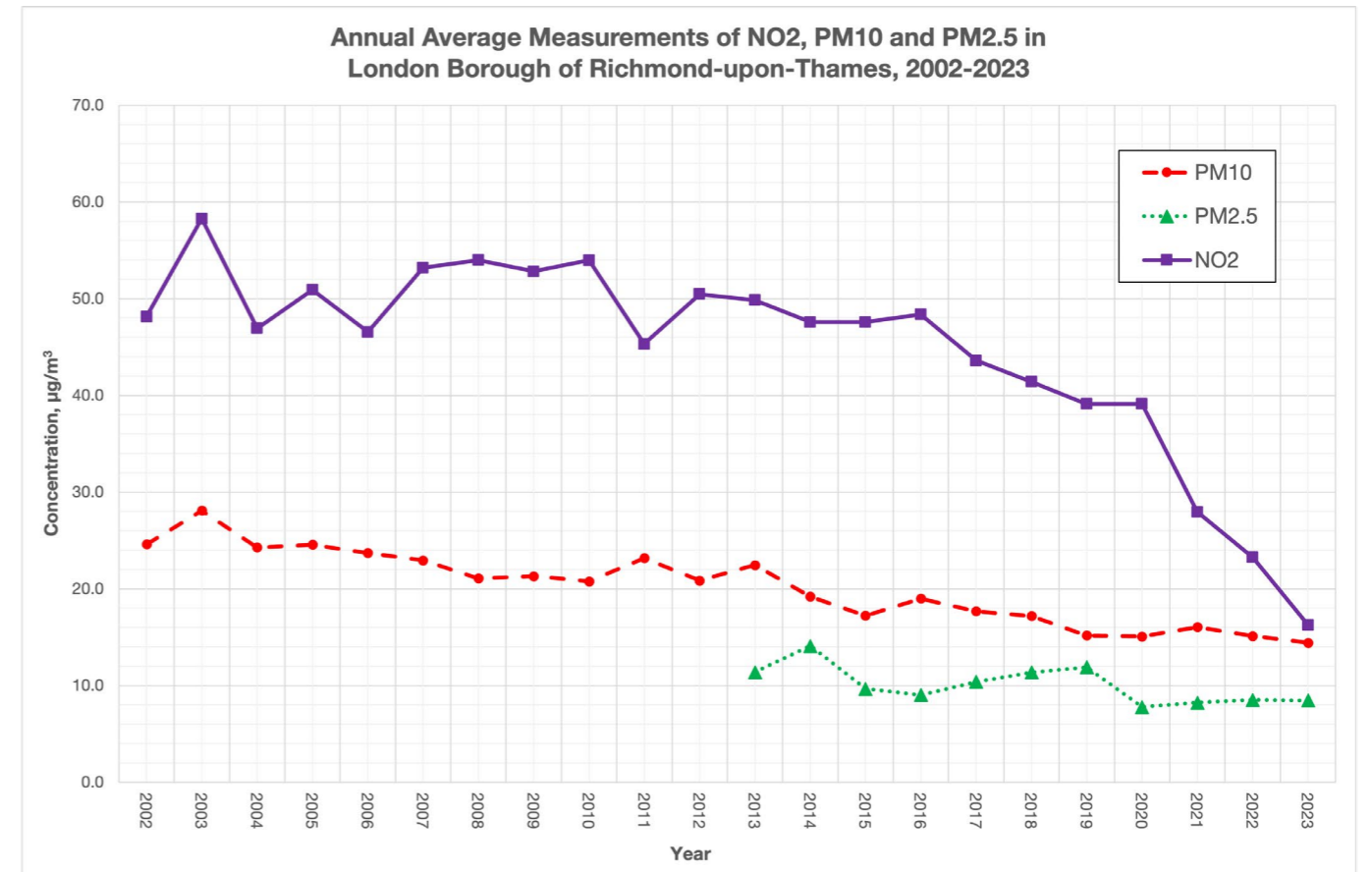


Figure 1. Annual average NO₂ (purple squares, average of 41 measurement sites in the Borough), PM₁₀ (red circles & dashed line, Richmond Castelnau monitoring station) since 2002, and PM_{2.5} (green triangles & dotted line, London Teddington monitoring station) since 2013. Data from Defra, Imperial College, and Richmond Council. Measurements are shown in µg/m³.

Table 1: WHO recommended air quality guideline levels and interim targets

Pollutant	Averaging time	Interim target				Level, µg/m ³
		1	2	3	4	
PM _{2.5}	Annual	35	25	<u>15</u>	<u>10</u>	5
NO ₂	Annual	<u>40</u>	<u>30</u>	<u>20</u>		10

Table 1. WHO guidelines for incremental reduction of NO₂ and PM_{2.5} targets until the guideline level is attained. Our targets for 2024-2029 are shown in green, bold, underlined. Range of current measurements in the borough are shown in orange italics.