



2022-2030

Ealing Council Air quality strategy



Ealing

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Executive Summary

This Air Quality Strategy (AQS) pulls together key information about local air quality topics, setting out a vision for improving and safeguarding the health of those who live and work in Ealing.

This strategy aims to explain why we need to improve air quality, describe the air pollution challenges we currently face in Ealing, outline the actions the council will take to improve air quality and offer advice for how you can reduce your exposure to air pollution.

The case for improving air quality

Air pollution in the UK and in Ealing in particular has reduced in recent decades. However, levels of nitrogen dioxide (NO₂) and particulate matter (PM_{2.5}) are still high in Ealing and across London. Recent studies have estimated that between 147 and 165 premature deaths each year in Ealing are related to long-term exposure to these pollutants.¹ There is increasing evidence of links between exposure to air pollution and a wider range of health effects, such as intra-uterine impacts, adverse birth outcomes, poor early life organ development, diabetes, reduced cognitive performance, and increased dementia risk.

Air pollution affects everyone who lives and works in Ealing throughout their lives. The most vulnerable groups include children, pregnant women, and the elderly. The most vulnerable in our society are often those whose health is most at risk.

Air pollution challenges in Ealing

Ealing Council carries out a range of air quality monitoring to track pollution in the borough. The council has declared an Air Quality Management Area (AQMA) covering the council due to high concentrations of NO₂ and historically high concentrations of particulate matter. This means that we need to take action to reduce concentrations to safe levels.

Road transport and heating are the most important sources of both NO₂ and particulate matter emissions in Ealing. Particulate matter concentrations are also strongly affected by sources from London, the rest of the UK, and mainland Europe.

¹ Environmental Research Group – Imperial College London, 2020, https://www.london.gov.uk/sites/default/files/london_health_burden_of_current_air_pollution_and_future_health_benefits_of_mayoral_air_quality_policies_january2020.pdf

How we will improve air quality in Ealing

Our vision for improving air quality in Ealing is set out in a number of key themes. **Reducing traffic emissions** is a priority, with actions ranging from making walking and cycling more accessible to improving emissions from the vehicle fleet. Wood burning and **improving indoor air quality** are also considered, as there is growing evidence that they affect our health. The changing landscape of Ealing is considered through **reducing the impact of new and existing developments**, such as controlling emissions of odour and dust and developing **green infrastructure**, linking to Ealing's Greenspaces Strategy.

Raising awareness of air quality is highlighted through actions including provision of clear and accurate air pollution information, and engaging with local businesses and community groups. Finally, there is a description of the **monitoring and review** process to track the performance of these actions set out in the AQS.

Spotlights

Neighbourhoods which exemplify specific air quality challenges in Ealing are given a 'spotlight', presenting the main local issues and potential solutions:

- **Acton:** a retail and commerce hub with high levels of traffic congestion, and the location of Acton Goods Yard.
- **Southall:** the location of a large area of redevelopment at the former Southall Gasworks site, known as The Green Quarter.
- **Greenford:** a residential neighbourhood with limited public transport that connects north and south of the borough exhibits regular periods of traffic congestion, therefore making it more vulnerable to elevated air pollution level.

Types of resources provided

In each chapter of the Air Quality Strategy we have provided links to more information. This includes material provided by the Council, TfL and Government-led programmes which support reduction of emissions, as well as useful apps, energy saving websites, relevant charities and local conservation groups.

This Air Quality Strategy is supported by other publications by Ealing Council, including the Air Quality Action Plan 2022-2027, which focusses on short-term measures to improve NO₂ concentrations in Ealing, and our Annual Status Reports, which provide yearly updates on concentrations in the borough.



1

An Air Quality Strategy for Ealing

In this section

1.1 Our Vision

1.2 How we will deliver the strategy

1.3 How we will deliver the strategy

1.4 How does the AQS align with other key policies?

1 An Air Quality Strategy for Ealing

This Air Quality Strategy sets out Ealing Council’s vision for improving air quality and safeguarding the health of everybody who lives and works here.

This strategy aims to

Set out the case for improving air quality

Describe the air quality challenges we currently face in Ealing

Outline the actions the council will take to improve air quality

Offer advice for how you can reduce your air pollution footprint, and where to find more information about air quality



1.1 Our Vision

Our vision is for clean air for all Ealing residents and continuous improvements in the quality of our environment through development of sustainable transport and green spaces.

Our key goals for the strategy are presented below. We have developed a series of action areas to address air pollution in Ealing and and achieve these goals.

Strategy Goals



Improve air quality

Protect the health and wellbeing of Ealing residents from the harmful effects of nitrogen dioxide (NO₂) and particulate matter (PM) air pollution. Support national, regional and local initiatives to meet EU thresholds for key pollutants as soon as possible.



Tackling the climate crisis

We will work to keep Ealing clean and green and take leadership in ensuring the borough we build is sustainable. We will take leadership on tackling the ramifications of the climate crisis, by aiming for the highest environmental standards as we grow new jobs and homes.



Fighting inequality

We want to create a borough where we work hard to address inequalities in all their forms, to ensure that no-one is left behind in achieving their potential.



Protect biodiversity

Ensuring our parks, open spaces and nature are protected and enhanced. Reduce emissions of pollutants to safeguard local ecological sites and enhance biodiversity, and support ongoing greening efforts across the borough, to create healthy spaces and adapt to the impacts of climate change.



Protect health and wellbeing

Protecting and enhancing the physical and mental health of all, supporting our older residents to enable them to remain independent and resilient. Improve air quality and support access to healthier travel choices.



Raise public awareness

Promoting awareness of the causes and impacts of air quality issues, as well as the available local solutions. Bring people together to build strong neighbourhoods and communities empowering volunteers, encouraging community activism, and engaging civic and faith leaders.



Promote sustainable infrastructure

Making sure the growth that takes place in Ealing enhances its character, conserves its future and makes great places where people want to live. Ensure local transport and development planning supports investment in sustainable infrastructure, that limits impact on air quality, enabling a shift to low-emission transport and energy options.



Creating good jobs

We want growth in Ealing to be inclusive, where people can both contribute to and benefit from growth and economic development. We want to create good quality jobs in our borough and deliver an ambitious programme of building more genuinely affordable homes.



Support the transition to clean energy

Supporting the uptake of low-emission energy technologies and improvements in efficiencies, and reducing reliance on the consumption of fossil and solid fuels.

1.2 How this strategy has been developed

To achieve this vision, we have identified a number of action areas aimed at key polluters and raising public awareness. Air pollution in Ealing comes from a wide range of sources, so we have included a large variety of action areas to ensure that we deliver as much improvement as possible.. This includes both the council's activities and other emissions. Our action areas are:

- Reducing road traffic emissions (4)
- Improving indoor air quality and tackling wood burning (5)
- Reducing the impact of new developments on air quality (6)
- Investing in green infrastructure (7)
- Raising awareness of air quality (8)

It is important that we ensure that any actions don't cause new air quality problems elsewhere in Ealing, or harm quality of life for our residents. In particular, we are committed to making sure that our plans are inclusive of people who might not be able to change their lifestyle to reduce their air pollution footprint.

Not all air pollution in Ealing comes from inside the borough, and there are some sources of emissions which are outside the council's control. For these areas, we will work with regional and national government to bring down emissions on a wider scale.

Ealing Council has developed this strategy through **collaboration** with stakeholders across Ealing. We have sought views from local residents, businesses, and Council representatives to ensure that the strategy is **inclusive** and **equitable**, and represents the priorities and perspectives of the local community.

1.3 How we will deliver the strategy

This Air Quality Strategy has been developed alongside the updated Air Quality Action Plan (AQAP) for Ealing², which describes specific air pollution reduction measures in further detail.

Ealing Council will monitor, review, and regulate the measures discussed in this Strategy and the related Air Quality Action Plan to ensure they can respond to the air quality challenges in the borough in the most effective way. This strategy will be reviewed every 5 years to assess progress and adjust the air quality improvement goals for Ealing as necessary. The detailed actions in the Air Quality Action Plan will also be reviewed and updated every 5 years. Yearly updates on our progress are provided in our Annual Status Reports, which can be found on the EalingAir website³. More information on monitoring and review can be found in Chapter 9.

2 Air Quality Action Plan (AQAP),
<https://ealingair.org.uk/AirQuality/Reports.aspx>

3 <https://ealingair.org.uk>



1.4 How does this AQS align with other key policies?

This Strategy is aligned with national, regional, and local policies, plans, and strategies, that either directly or indirectly relate to improving air quality. By setting goals and targets at a national and local level, air pollution can be tackled from various perspectives and at a range of scales. The layers of local, regional, and national policy and initiatives relevant to the Air Quality Strategy are presented in **Figure 1.1**.

Figure 1.1: Local, regional and national policy, guidance and initiatives linked to the Air Quality Strategy



2

Why do we need to improve air quality?

In this section

2.1 Health and air quality

2.2 Who is most vulnerable to air pollution?

2.3 How is air quality protected?

2.4 Social equity and health inequalities

2 Why do we need to improve air quality?

Air pollution in the UK has seen significant improvements in recent decades due to the introduction of policies and measures designed to reduce emissions from transport, industry, and homes. However, although ambient air quality in the UK is generally considered good, elevated pollution levels still occur in many towns and cities across the country.

2.1 Health and air quality

It is estimated that air pollution in the UK **reduces the life expectancy of every person by an average of 7-8 months, with an associated cost of up to £20 billion each year**⁴. Episodes of higher air pollution increase respiratory and cardiovascular hospital admissions and mortality, with harmful short-term effects including exacerbating symptoms for those with pre-existing heart and lung conditions, such as asthma. There is also growing evidence that air pollution is associated with other long-term ailments which are related to reduced life expectancy such as stroke, lung cancer, respiratory conditions and cardiovascular disease, dementia, diabetes, and adverse pregnancy outcomes^{5,6}. Recent studies have estimated that between 137 and 167 deaths are related to long-term exposure to man-made air pollution annually in Ealing⁷.

The two most important pollutants in London are:

- **Nitrogen dioxide** (NO₂);
- **Particulate matter** (PM₁₀ and PM_{2.5}).


4 Department for Environment, Food and Rural Affairs, The Air Quality Strategy for England, Scotland, Wales and Northern Ireland, Volume 1. Accessed at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69336/pb12654-air-quality-strategy-vol1-070712.pdf

5 Public Health England (2014), PHE-CRCE-010: Estimating local mortality burdens associated with particulate air pollution. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/332854/PHE_CRCE_010.pdf

6 WHO, Ambient (outdoor) air pollution, [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

7 King's College London Understanding the Health Impacts of Air Pollution in London https://www.london.gov.uk/sites/default/files/hia_in_london_kingsreport_14072015_final.pdf

What is nitrogen dioxide?



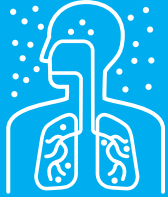
Has the chemical formula NO_2 , meaning that it has two oxygen atoms and one nitrogen atom

One of a group of gases called nitrogen oxides (NO_x)

Red-brown in colour, but colourless in our air as it is very diluted

Released by burning fossil fuels

What is particulate matter?



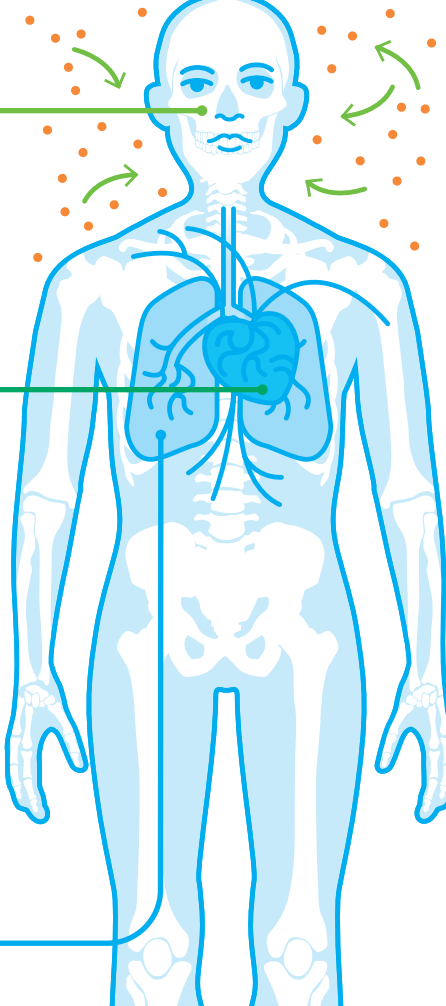
Solid dust particles and liquid droplets

PM_{10} is all dust up to $10\ \mu\text{m}$ wide, $\text{PM}_{2.5}$ is dust up to $2.5\ \mu\text{m}$ wide

Contains a mixture of different chemicals, some of which are harmful to human health

Mostly comes from regional sources

What are the potential health impacts of the different pollutants?



Particulate matter (PM_{10})

- Coarse particles can irritate the eyes, nose, and throat, cause increases in respiratory illness, and deterioration in cases of cardio-respiratory disease.

Fine particulate matter ($\text{PM}_{2.5}$)

- Fine particles which can enter deep into the lungs and even the bloodstream.
- Short term exposure (a few hours to weeks) can increase risk of cardiovascular disease.
- Longer-term exposure (e.g. a few years) increases the risk for cardiovascular mortality to an even greater extent and reduces life expectancy.

Nitrogen dioxide (NO_2)

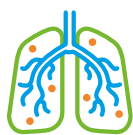
- Adverse effects of the respiratory system. Irritation of the lungs and lower resistance to respiratory infections.
- Frequent exposure to concentrations that are typically much higher than those normally found in the ambient air may cause increased incidence of acute respiratory illness in children.

2.2 Who is most vulnerable to air pollution?

Air pollution affects everyone who lives and works in Ealing. The most vulnerable groups include:



Elderly



Those with lung disease



Children



Pregnant Women

Children exposed to PM_{2.5} are more likely to have reduced lung function and develop asthma as they grow up.

Approximately 21% of Ealing’s population is 15 and under, while 13% of the population is over the age of 65⁸. Around 14% of the local population find that their day-to-day activities are limited in some way, or have a long-term health problem or disability.⁹



⁸ ONS, Local authority ageing statistics, based on annual mid-year population estimates (2019), <https://www.ons.gov.uk/datasets/ageing-population-estimates/editions/time-series/versions/1>

⁹ Equality in Ealing Summary Needs Assessment (August 2020), https://www.ealing.gov.uk/download/downloads/id/7840/equalities_needs_assessment_-_april_2017.pdf

2.3 How is air quality protected?

The UK sets out Air Quality Standards and Targets based on the latest health evidence. These establish acceptable levels of air pollution that will not cause harm to human health. These Air Quality Standards are periodically reviewed to ensure that they are in line with the latest evidence. The World Health Organization (WHO) has recently completed its review of evidence and has proposed new guideline limit values¹⁰ for air pollutants which are lower than the current limits set in the UK. The Committee on the Medical Effects of Air Pollutants (COMEAP) supports the tighter restrictions to reduce health risks associated with air quality¹¹.

In the London Environment Strategy¹², the Mayor has set out the ambition that all of London will have concentrations of PM_{2.5} within the WHO guideline limit by 2030.

Air quality measurements are typically presented as a daily or annual mean concentration in micrograms per cubic meter (µg/m³).

Table 2-1: Annual mean concentration limits for pollutants (µg/m³), as defined in the EU directives, UK objectives and WHO guideline limit values

Pollutant	EU obligation (2020) ¹³	UK objective (2020) ¹⁴	WHO guideline limit values (2021) ¹⁵
NO ₂	40	40	10
PM ₁₀	40	40	15
PM _{2.5}	20	20	5

10 More information on the limit values can be found at <https://www.who.int/news-room/questions-and-answers/item/who-global-air-quality-guidelines>

11 COMEAP, Summary of COMEAP recommendations for the quantification of health effects associated with air pollutants, <https://www.gov.uk/government/publications/air-pollutants-quantification-of-associated-health-effects>

12 Mayor of London, London Environment Strategy, <https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>

13 European Commission, Air Quality Standards, <https://ec.europa.eu/environment/air/quality/standards.htm>

14 UK AIR, UK Air Quality Limits, <https://uk-air.defra.gov.uk/air-pollution/uk-eu-limits>

15 WHO, Ambient (outdoor) air pollution, [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

2.4 Social equity and health inequalities

The most vulnerable in our society are often those whose health is most at risk

London has the widest health inequalities in England, defined by the Healthy London Partnership as “systematic, avoidable and unfair differences in mental or physical health between groups of people”¹⁶. Ealing as a borough experiences inequality in a number of ways, including disparities in income, housing, and health indicators, such as life expectancy.

Recent air quality exposure studies have found that there are clear social inequalities in traffic-related air pollution exposure in London¹⁷. Communities which have higher levels of deprivation, or a higher proportion of people from a non-white ethnic background, are more likely to be exposed to higher levels of air pollution. Black, Asian and Minority Ethnic (BAME) Londoners are also more likely to be affected by the impacts of the climate crisis¹⁸. In general, less affluent areas emit the least NO_x and PM, while more affluent areas emit the highest levels of pollution¹⁹. Around half of Ealing’s population are BAME, so this is an important consideration for us²⁰.

Recent policies to improve air pollution are reducing the extent of this inequality, particularly for NO₂ exposure. However, in 2019, annual average NO₂ concentrations were still between 16% and 27% higher in areas where non-white people were most likely to live, compared to areas where they were least likely to live.

All Londoners benefit from an environment and economy that promote good mental and physical health, including tackling issues such as fuel poverty, schools in areas of poor air quality, and ensuring all Londoners have access to good quality green and other public spaces.

Measures to improve air quality can improve the quality of life for those who are most vulnerable. For example, improving access to public transport can benefit those who may not be able to regularly walk or cycle such as young children, those with a disability or long-term health condition.

16 Healthy London Partnership <https://www.healthy london.org/>

17 Logika (2019), Air pollution and inequalities in London: 2019 update, https://www.london.gov.uk/sites/default/files/air_pollution_and_inequalities_in_london_2019_update_0.pdf

18 Mayor of London, BAME Londoners more likely to be affected by climate emergency, <https://www.london.gov.uk/press-releases/mayoral/bame-londoners-bear-brunt-of-climate-emergency>

19 Barnes and Longhurst (2019), Emissions vs exposure: Increasing injustice from road traffic-related air pollution in the United Kingdom, <https://www.sciencedirect.com/science/article/pii/S1361920919300392#!>

20 https://data.ealing.gov.uk/population/#/view-report/40d8fa6651d042f8870d1b26e949be38/___iaFirstFeature

3

Air quality in Ealing

In this section

3.1 How do we monitor local air quality?

3.2 Where does air pollution in Ealing come from?

3.3 Air quality levels in Ealing

3.4 Clean air and climate change

3 Air quality in Ealing

Ealing Council undertakes a range of monitoring and assessments to track air quality across the borough in order to compare levels of air pollution with thresholds for the protection of human health and the environment.

As part of its statutory duties, Ealing Council has declared an Air Quality Management Area (AQMA) covering the entire borough, due to high concentrations of NO₂ and historically high concentrations of PM₁₀. This means that we need to take action to reduce concentrations of these pollutants to safe levels.

The Greater London Authority has identified 8 Air Quality Focus Areas in Ealing. These are areas where people are exposed to high levels of pollution. The Air Quality Focus Areas are:

- **Acton Central:** Acton A40 North Acton Station/Gypsy Corner/Savoy Circus;
- **Hanger Hill:** Hanger Lane/Twyford Abbey Road;
- **Perivale:** A40 Western Avenue Teignmouth Gardens to Alperton Lane;
- **Elthorne:** Uxbridge Road/Ealing Broadway and Haven Green;
- **South Acton:** Acton High Street/Gunnersbury Lane junction to rail in Acton High Street;
- **Southall:** King Street/The Green/Western Road/South Road;
- **East Acton:** Victoria Road/Portal Way/ Wales Farm Road; and
- **Central Greenford:** Greenford Road (junction with Rockware Avenue) to Greenford Road (junction with Whitton Avenue West)

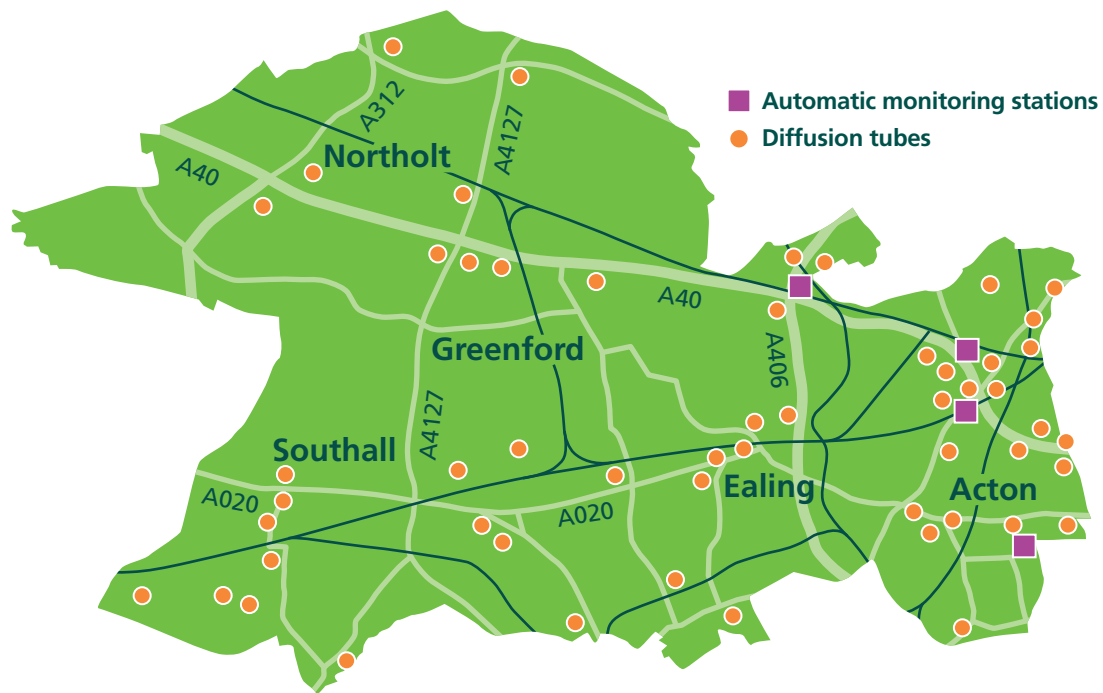
3.1 How do we monitor local air quality?

Monitoring air quality helps us understand the current levels of air pollution across Ealing, making sure that we identify where action is needed. We measure air quality using 67 monitoring stations across Ealing. All of them monitor NO₂, with four of them also monitoring PM₁₀. We publish our latest monitoring data each year in our Air Quality Annual Status Report (ASR).

We also add temporary air quality monitoring sites in some cases where residents express concerns. For example, in 2019, two new temporary sites located at St Mark's Primary School were added due to concerns expressed by parents about the exposure of their children to pollution from traffic on Lower Boston Road. We are also currently monitoring air quality around the Green Quarter site, following concerns from local residents regarding potential odour and air pollution issues related to the redevelopment of the site.



Air quality monitoring stations in Ealing



Automatic monitoring stations

- Hourly measurements of multiple pollutants
- Larger boxes, often on pavements or in parks
- Continuously collecting data on NO₂, particulates and other substances

Diffusion tubes

- Collected monthly, and measure average NO₂ concentrations
- You can find them attached to lampposts and buildings
- Provide long-term estimations of concentrations of NO₂

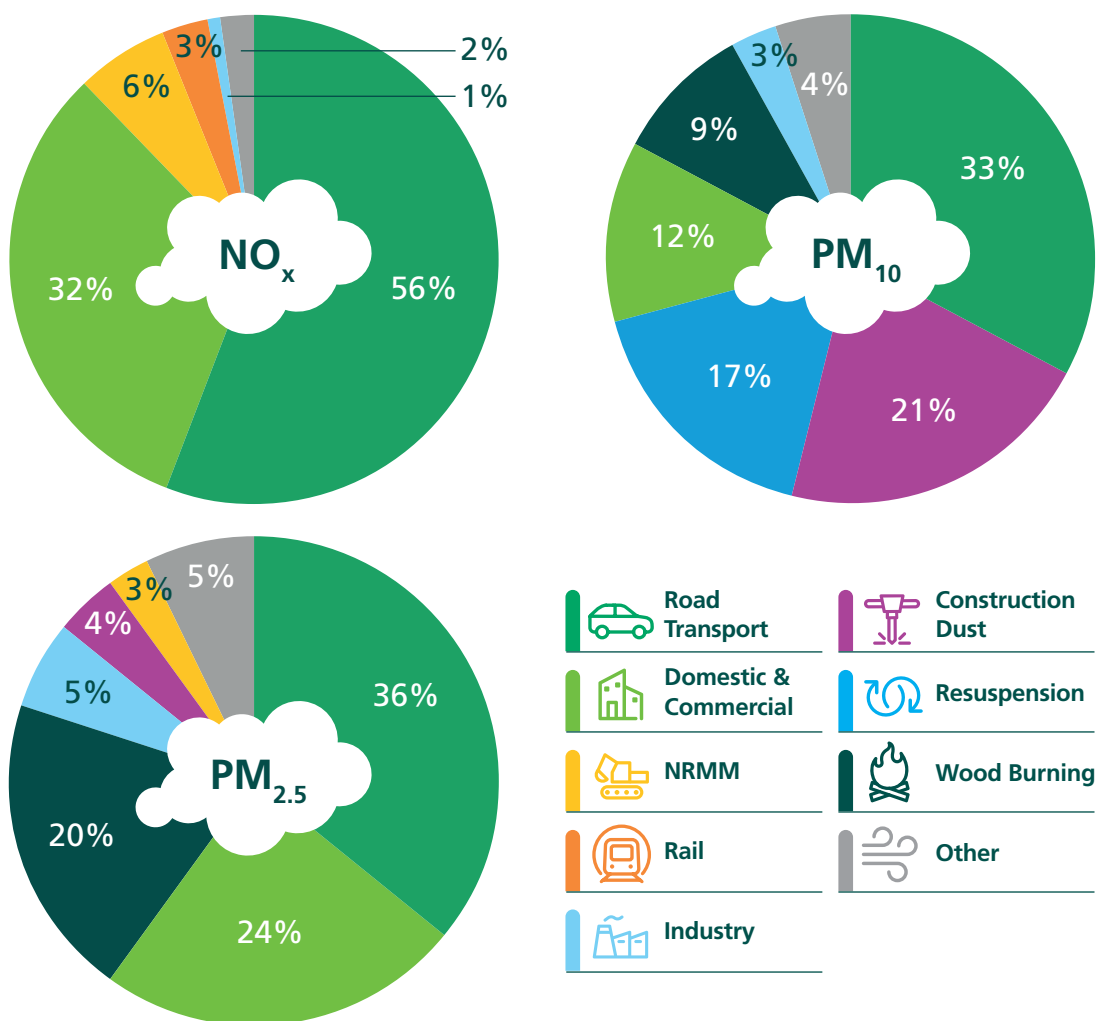


3.2 Where does air pollution in Ealing come from?

There are a range of air pollutants present in London, and each will impact human health and the environment in different ways. The key pollutants in Ealing are NO_x (which forms NO₂), PM₁₀, and PM_{2.5}. NO₂ is a pollutant that is short-lived, so local sources are very important. PM₁₀ and PM_{2.5} stay in the atmosphere longer and are therefore affected more strongly by emissions from the rest of the UK and mainland Europe.

For each of these pollutants, road transport is the dominant source of emissions in Ealing. NO_x and PM_{2.5} are also emitted by domestic and commercial combustion emissions from gas, coal, and oil. For PM₁₀, construction dust and resuspension are large contributors, while wood burning is another important source of PM_{2.5} emissions. Non-road mobile machinery (NRMM), which are vehicles used for domestic, industrial, and commercial construction, also contribute to all three pollutants.

Figure 3.1: Primary emission sources of NO_x, PM_{2.5} and PM₁₀ in Ealing (based on LAEI 2019 data)²¹



²¹ London Atmospheric Emissions Inventory (LAEI) 2019, <https://data.london.gov.uk/dataset/london-atmospheric-emissions-inventory--laei--2019>

3.3 Air quality levels in Ealing

Some areas of Ealing experience higher concentrations of pollutants than others, due to the local activities taking place. For example, measured concentrations of PM₁₀ and NO₂ are often highest along roadsides due to road traffic. The maps shown in Figure 3.2 and Figure 3.3 provide illustration as to how concentrations of NO₂ change across Ealing Borough, and Greater London, respectively.

Figure 3.2 Annual mean concentrations of NO₂ across Ealing, 2019

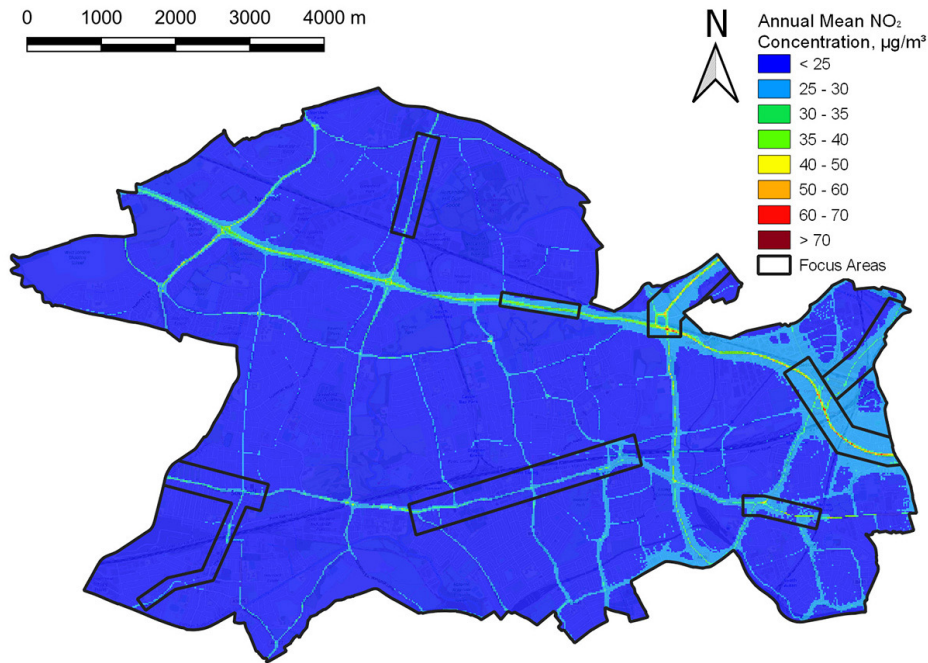
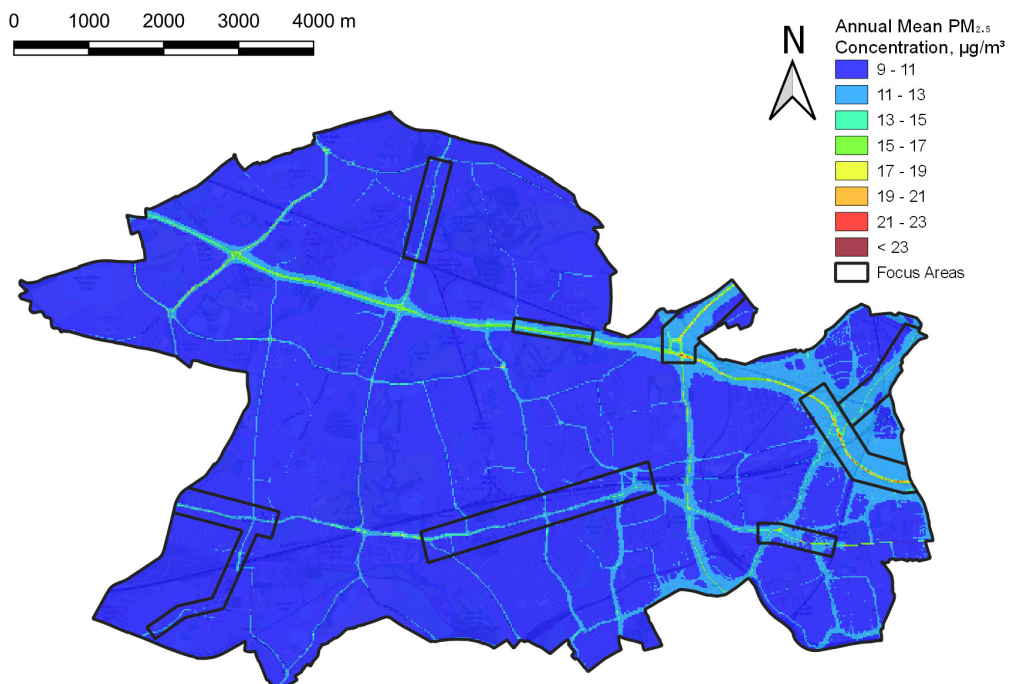


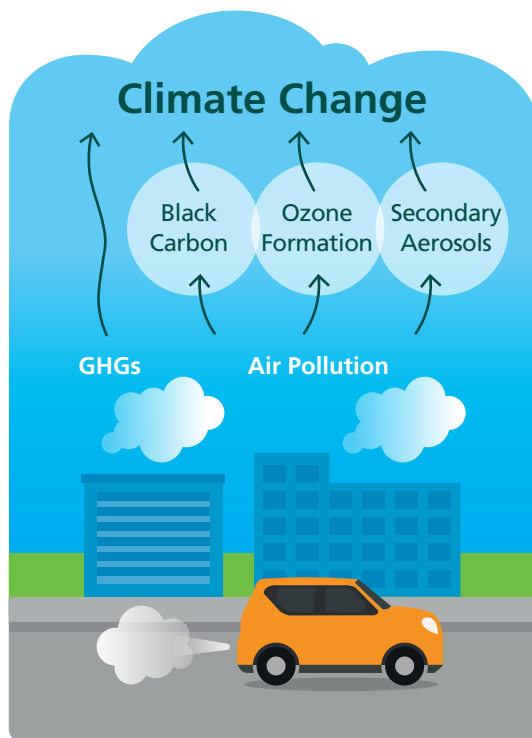
Figure 3.3 Annual mean concentrations of PM_{2.5} across Ealing, 2019



3.4 Clean air and climate change

Air quality and climate change can sometimes be viewed as two separate issues, particularly as air quality is typically assessed on a local scale, whilst the impacts of climate change have a global reach. Combustion of fossil fuels is a major source of both air pollutants like NO_x and PM and greenhouse gas emissions like carbon dioxide (CO₂) and volatile organic compounds (VOCs). This means that improving air quality by reducing emissions can also help to address climate change.

Examples of links between air pollutants and climate change



Ozone, which is formed by pollutants including NO_x, is a powerful greenhouse gas. It contributes directly to climate change, as well as reducing carbon uptake by vegetation. Therefore, taking action to reduce emissions of NO_x will help to limit ozone creation, and thereby minimise these climate impacts.

Black carbon forms part of the **particulate matter** emitted by diesel engines due to incomplete combustion, and also absorbs heat, contributing to climate change.

Air pollutants like nitrogen oxides, sulphur dioxide, ammonia and volatile organic compounds can all lead to the formation of **secondary aerosols**, which reflect light.

Limiting emissions of these pollutants by making behavioural changes such as shifting away from private vehicle use, and making homes, workplaces and vehicles more energy efficient, contributes to local efforts to limit our contribution to climate change.

Climate change also has an impact on air quality. Longer, hotter summers have been forecast to occur in London as a result of climate change, which in turn can increase the frequency and severity of smog. On the other hand, more periods of rainfall during winter may reduce ambient pollutant concentrations²².

Ealing's Climate and Ecological Emergency Strategy 2021-2030²³ describes our climate commitments and the actions that we are taking to reduce emissions and become carbon neutral by 2030. Improved air quality is considered to be a key co-benefit of the strategy.

22 Air quality expert group, Air Quality and Climate Change: A UK Perspective, <https://uk-air.defra.gov.uk/library/assets/documents/reports/aqeg/fullreport.pdf>

23 Ealing Council Climate and Ecological Emergency Strategy 2021-2030 https://www.ealing.gov.uk/downloads/file/15879/climate_and_ecological_emergency_strategy_2021-2030

4

Reducing road traffic emissions

In this section

4.1 Making walking and cycling more accessible

4.2 Public transport

4.3 School Streets

4.4 Reducing vehicle idling

4.5 Encouraging the uptake of low-emission vehicles

4.6 Improving emissions from the council fleet

4.7 Ealing Spotlight: Acton

4 Reducing road traffic emissions

Pollution from road traffic is the most important cause of air quality issues in Ealing. Car journeys currently account for 40% of trips in Ealing and two thirds of trips across London. Diesel cars have the biggest impact on air quality (35% of NO_x emissions), while petrol cars only contribute 8% of total emissions.

Ealing Council have published local borough-wide transport strategies and plans to increase the use of and access to sustainable travel options. Ealing Council's Transport Strategy (2019-2022)²⁴ explains the transport priorities for Ealing Council. These are:

Modal shift – reducing the dependency on the motorised vehicle by moving trips, particularly the shorter ones, to active travel using more sustainable modes (walking, cycling and public transport) through behaviour change.

Improve road safety – making the borough roads as safe as possible, particularly for those modes of transport perceived to be more vulnerable, i.e. walking and cycling.

Lower transport's environmental footprint – we know that not everybody has the option to switch to active travel, so we also need to encourage cleaner driving behaviours, and provide the infrastructure to allow residents to switch to low-emission vehicles.

Driving should be discouraged as much as possible for those who can use other methods/ active transport. This will reduce congestion and incentivise walking and cycling, particularly for smaller journeys and school runs.

The details of the measures we are taking to help achieve these goals are given below.

²⁴ Ealing Council Transport Strategy 2019-2022 https://www.ealing.gov.uk/downloads/download/5408/transport_strategy

The safer that streets are,
the more people will use them
for active travel.

Ealing does not stand alone in working to improve air quality in London; our work to improve local air quality in Ealing contributes to wider benefits seen across London. Equally, we support pan-London air quality action, as Ealing will see the benefits over time.

4.1 Encouraging the uptake of low-emission vehicles

Ealing Council is committed to tackling climate change and improving local air quality. While one way to do this is to reduce the total amount of travelling done by car, we know that not all car journeys can be replaced with other modes of transport. This means that finding ways to reduce emissions from car journeys is as important as encouraging those who can to shift to alternative modes of transport when possible.

Electric vehicles (EVs) have lower running costs, are currently exempt from the Congestion Charge and Ultra Low Emission Zone schemes, pay no road tax (Vehicle Exercise Duty) and benefit from parking permit discounts in Ealing, as well as reduced company car tax.

Ealing Council recognises that although EVs contribute towards reducing emissions, they still emit pollutants into the air from tyre and brake wear. Nevertheless, EVs are less polluting overall than their conventional counterparts.

4.1.1 What are we doing now?

Over the past five years, Ealing Council and partners Source London and Siemens/ Ubitricity have successfully installed 215 EV charging points across the borough. There are also around 85 additional charging points on private land open to the public.

The implementation of 100% emissions-based permit parking for long-term parking is complete. Low emission vehicles are offered a discount in pay & display and car parking spaces. There is a scale categorising each vehicle into one of four carbon dioxide (CO₂) bands, with an additional surcharge added to diesel vehicles which are not Euro 6 standard.

4.1.2 What are we doing next?

Building on this success by increasing the availability of charging points is a priority for the council going forward. We are currently prioritising neighbourhoods that are more than 10 minutes' walk from existing EV charging points, and we hope to reduce the waling time to an EV charging point to 5 minutes across Ealing.

We are committed to increasing the number of EV charging points to 2,000 by 2026.

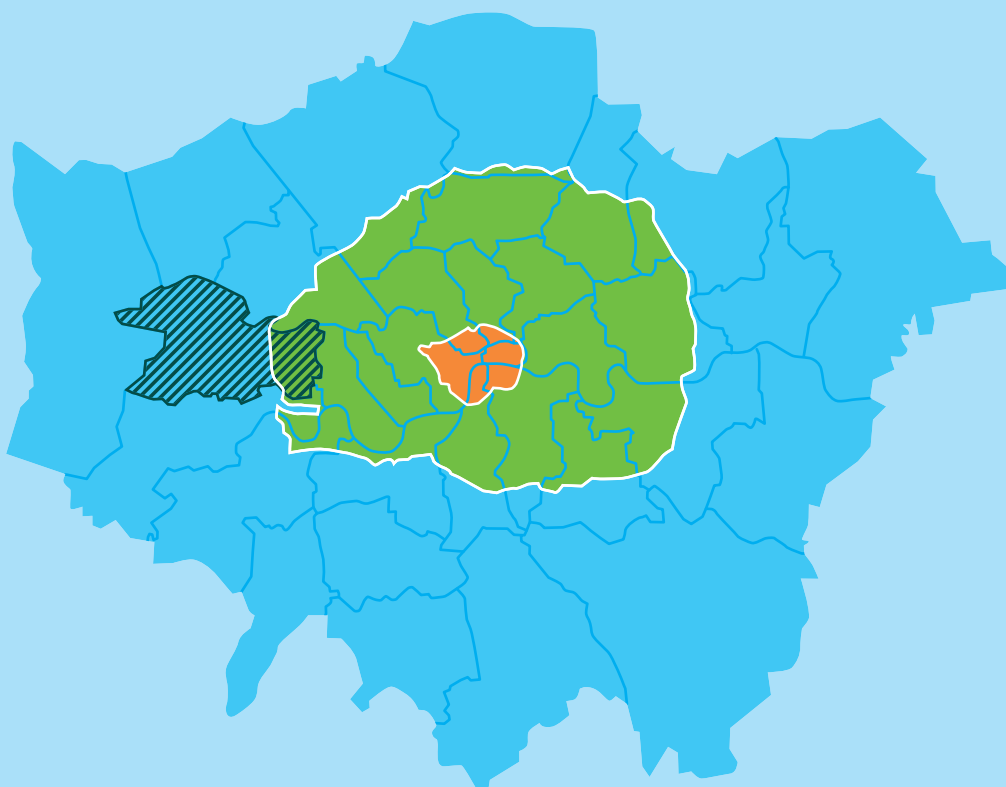
i Where to find more information		
Tool / Resource	Description	Link
Council Website	Finding or installing electric vehicle charging points.	https://www.ealing.gov.uk/info/201173/transport_and_parking/1316/electric_vehicles_and_charging_points



The London Ultra Low Emission Zone

The Central London Ultra Low Emission Zone (ULEZ) is designed to encourage a shift towards the use of vehicles that have less of an impact on local air quality. From 25 October 2021, the ULEZ expanded to create a single, larger zone up to the North Circular Road (A406) and South Circular Road (A205). On the 29th of August 2023, the ULEZ will expand again to cover all of London.²⁵

In the ULEZ, a £12.50 daily charge is issued to vehicles that do not meet the Euro 4 emission standard for petrol cars and the Euro 6 emission standard for diesel cars. The requirements for diesel vehicles are stricter because these vehicles have a greater impact on air quality.



- Central London ULEZ and Congestion Charge Zone
- Expanded ULEZ Zone (From 25 October 2021)
- ▨
 London Borough of Ealing
- Expanded ULEZ Zone (from 29 August 2023)

Further information on the ULEZ can be found here:
<https://tfl.gov.uk/modes/driving/ultra-low-emission-zone>

²⁵ <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/proposed-ulez-expansion-for-2023>

4.2 Making walking and cycling more accessible

Cycling and pedestrian infrastructure is critical because accelerating the reduction in road space for cars and increasing the space for walking and cycling will improve air quality.

Walking and cycling can have significant benefits for Ealing and Ealing residents. Higher rates of walking and cycling can reduce congestion and emissions, increase public transport capacity, and have substantial health and wellbeing impacts. Most car trips in the borough are very short and in many cases could be cycled or walked. 31% of car trips originating in Ealing are under 2km in length.

To encourage more people who can to consider active travel when taking journeys, we are committed to making walking and cycling safer, more accessible, and more of an attractive option by putting walking and cycling first in the design of our streets.

4.2.1 What are we doing now?

We have carried out a number of policies designed to make walking and cycling more attractive in Ealing. We have implemented a 20 mph speed limit across all roads in Ealing, with the aim of improving road safety and making walking and cycling more accessible.

We are implementing the *Uxbridge Road walking and cycling corridor project*, which will separate cyclists from other road traffic along this key route. We are also working to improve the pedestrian and cycling experience in town centres, in order to make cycling and walking to and around these areas more attractive.

We have implemented a successful *School Streets* programme²⁶ which temporarily closes streets surrounding schools during peak arrival and departure time periods. This is described in detail in Section 4.3.

The *Let's Go Southall* programme aims to encourage and support residents to be more physically active. Southall is one of 12 areas across the country that has been selected for a Sport England programme to help people to choose more active lifestyles. Our *Get Southall Moving* active travel project will make this even easier.



²⁶ More information on the school street programme can be found https://www.ealing.gov.uk/info/201146/neighbourhood_and_streets/2610/ealing_school_streets


4.2.2 What are we doing next?

The council will continue to seek to create new routes across roads, railways, and canals, where these features block the easiest routes for pedestrians to get to important amenities.

We have pledged to invest £10 million to develop the Travel in Ealing Charter and active travel programme. The Travel in Ealing Charter is a document that sets out our commitment and approaches for engaging with people on future transport projects.

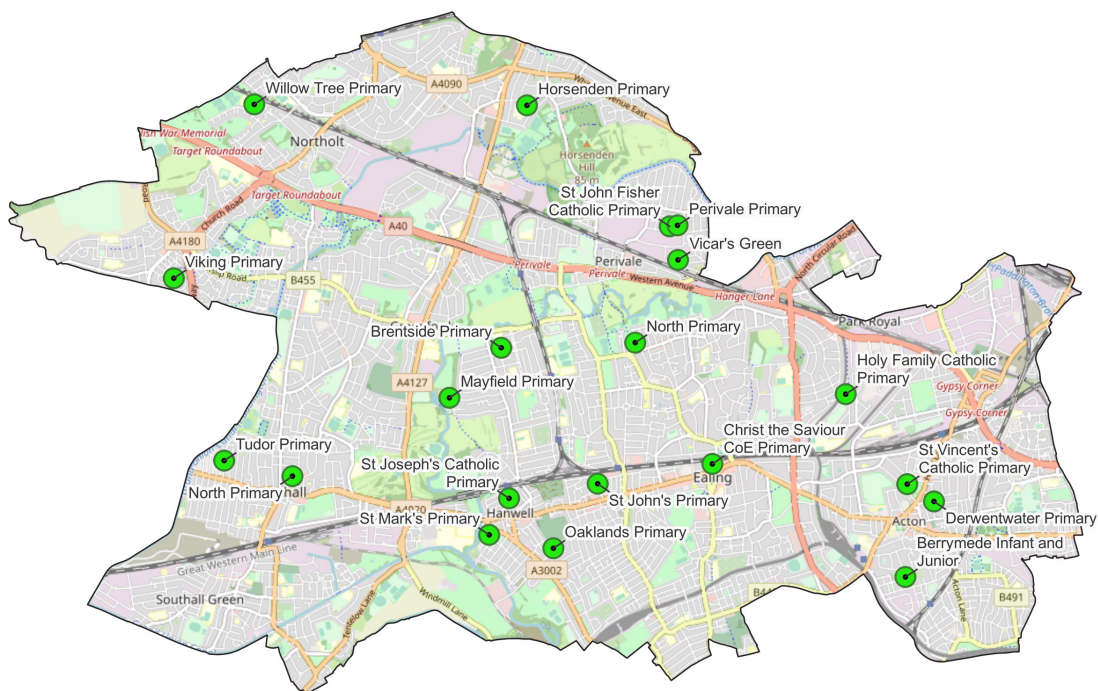
We will also provide £35 million funding for road and pavement infrastructure maintenance and improvements, including expanding the number of bike hangars to 150. and reclaiming road space for urban greening, sustainable drainage (SUDs) and other public realm improvements.

We will continue to assess our transport network to make sure we are reducing inequalities and removing barriers which may reduce the quality of life for a resident with impaired mobility.

 Where to find more information		
Tool / Resource	Description	Link
Ealing Council Cycle Plan 2019-2022	Our Cycle Plan sets out a policy framework for encouraging cycling. The overall aim is for the borough to be an exemplar for cycling.	https://www.ealing.gov.uk/downloads/download/5404/cycling_plan
The National Cycle Network	Assists in finding a cycle route, bike path or walking route near you through maps of the area. Traffic-free route guides are available throughout the UK.	https://www.sustrans.org.uk/national-cycle-network https://www.sustrans.org.uk/get-your-traffic-free-route-guides/



4.3 School Streets



The *School Streets* programme aims to improve children’s health by reducing their exposure to air pollution, and through the encouragement of active travel which can help reduce the health effects caused by obesity.

One quarter of London’s morning peak hour traffic is made up of families on the school run. In Ealing, 84% of primary school-aged children live within one mile of their school. This distance takes approximately 20 minutes to walk, or five minutes to cycle. The health benefits of active travel are well documented. Our *School Streets* initiative is designed to help make active travel easier, safer, and with better quality air for communities across the borough.

4.3.1 What is a School Street?

School Streets is a scheme where the streets near a school are closed to most traffic around school opening and closing times. Closing the streets to school and through traffic provides a low traffic area, making it easier for pedestrians and cyclists to use the road space and enable social distancing. *School Streets* help to achieve a safer, more pleasant environment for everyone using the streets, whilst maintaining access for residents and businesses within the designated zone.

Safer crossings and pedestrian infrastructure would make people feel more confident about letting their children walk.

4.3.2 How will School Streets increase active travel?

The schools that are taking part in *School Streets* are committed to encouraging walking, scooting, and cycling for the school journey. They want to reduce car use, congestion, and air pollution around their school to improve safety and health. The schools will support families that can use active modes of transport to increase their physical activity and improve health.

Ealing's first *School Street* was launched at Perivale Primary and St John Fisher Catholic schools in September 2020. This scheme was developed in consultation with the school and local community, over a period of 18 months. Almost 80% of those consulted agreed, or strongly agreed, that the *School Street* was a good idea.

We have pledged to build on this success to deliver 50 *School Streets* in Ealing by 2026.

4.4 Reducing vehicle idling


Leaving vehicle engines running while stationary is an unnecessary source of air pollution. The pollution caused by idling is highly localised and concentrated around areas with high footfall, such as schools. Younger people are more vulnerable to air pollution as they take twice as many breaths per minute compared to adults, and breathe closer to vehicle exhausts, so it is particularly important that we tackle idling emissions at these locations.

4.4.1 What are we doing now?

Our approach combines public awareness and education, anti-idling signage, and enforcement to target idling hotspots such as schools and taxi ranks. Anti-idling signage is in place at a number of locations across Ealing.

We are part of the Mayor of London's Idling Action London campaign, which delivers idling action events, school workshops, and business engagement.

Free driver training and resource toolkits are available for businesses to educate their staff on how to best to reduce air pollution and protect their health.




Switching off our engines when idling is an easy win for improving air quality.

4.4.2 What are we doing next?

We are identifying pollution hotspots for additional anti-idling measures and continuing our public awareness and education campaigns. By focusing our efforts on the areas where the most vulnerable people are affected, we hope to reduce the impacts of idling vehicles as much as possible.

We are also planning to introduce further anti-idling signage at pollution hotspots across Ealing for 2023 and beyond, and are investigating ways to make these signs more impactful by introducing enforcement via a borough-wide traffic management order (TMO) under section 6 of the Road Traffic Regulation Act 1984, based on the exemplar TMO provided by Idling Action London, that has also been implemented in the London Borough of Camden. A borough-wide TMO would provide consistency and parity across the borough and enable more equitable enforcement to take place across the whole borough.

Ealing Council will also campaign to win the powers we need from the Government to ramp up fines for idling vehicles to the maximum.

 Where to find more information		
Tool / Resource	Description	Link
Idling Action	Ealing Council is now part of a pan-London group of councils who are working together to find a viable and workable solution to address vehicle idling. The group has delivered school workshops, engaged with businesses and offered vehicle fleet training. You can also volunteer for local anti-idling initiatives.	https://idlingaction.london/
Engine Off Every Stop	Ealing Council is supporting a London-wide campaign, "Engine Off Every Stop". This aims to reduce avoidable air pollution, particularly NO ₂ , from idling vehicles.	https://www.aroundealing.com/news/engines-off/

4.5 Improving emissions from the council fleet

Freight vehicles, including HGVs and LGVs, make significant contributions to NO₂ concentrations in Ealing. Our Air Quality Action Plan includes several actions which aim to reduce pollution from freight vehicles, including those owned by the council and operated privately.



WestTrans, which operates our fleet, has secured Champion status through the Fleet Operator Recognition Scheme (FORS)²⁷ in recognition of our updated procurement practices, which include FORS accreditation requirements for any procured freight or fleet functions. As a result, 100% of the fleets operated on behalf of the council are now FORS-compliant.

Ealing Council are also in the process of reorganising freight to consolidate deliveries by participating in new logistics facilities. This will reduce congestion and vehicle emissions, and improve road safety.

The reorganisation is already being implemented at Ealing Broadway, and will be implemented in the Park Royal/East Acton area where air quality is adversely affected by the A40 and A406 road corridors.

Additionally, in Ealing Broadway, several schemes have successfully reduced annual vehicle trips. Examples of measures implemented to achieve this include the promotion of a centralised recycling and pest control service to businesses, and a food waste recycling scheme. These schemes will be replicated elsewhere in Ealing, using the Mayor's Air Quality Fund.

Car clubs can reduce congestion, reduce parking pressure, and cut pollution. Being a car club member in Ealing means you have access to a fleet of cars and vans across the borough. Cars can be booked for as little as an hour and there are discounted rates, whole day hire, or long term hire available.

A Zipcar Flex floating car club with EVs was introduced in Acton/Ealing in July 2021. As these car club vehicles are less polluting than the average car, using a car club can save money and reduce your air pollution footprint for essential journeys.

Where to find more information

Tool / Resource	Description	Link
Local Car Clubs	Local car clubs including ZipCar, Enterprise Car Club, HertzOnDemand now contribute over 100 vehicles in the borough.	http://www.zipcar.co.uk/ https://www.enterprise-carclub.co.uk/gb/en/home.html https://www.hertz247.co.uk/uk/en-gb/Home

²⁷ Fleet Operator Recognition Scheme <https://www.fors-online.org.uk/cms/>

4.6 Public transport

Encouraging people in Ealing to use public transport where possible is vital if we want to encourage people to take fewer journeys by car.

What are we doing now?

Ealing is already well-served by public transport: 91% of Ealing residents are within five minutes' walk of a bus service, and 99% are within seven minutes' walk (at average walking speed).

However, these routes don't always provide simple routes for journeys in the Borough. Public transport in Ealing needs to be easier, more convenient and safer for all, especially children, older adults, disabled people and other vulnerable users of our roads.

The Elizabeth Line, opened in 2021, provides more connectivity between Ealing, Reading and Central London. In addition to the extra routes, improvements have been made to several stations in Ealing to make stations more accessible. The West Ealing, Ealing Broadway, Acton Main Line and Southall stations now have step-free access from street to platform. Improvements have also been made to existing platforms, including new signage, waiting rooms, and customer information screens. Southall Station has been rebuilt with a ticket hall and ticket gates. Toilets and waiting rooms in the station have been refurbished, and three new lifts and a footbridge provide step-free access to platforms.

The council supports school children, the elderly, and those with a mobility impairment in accessing public transport, currently spending around £19 million every year on concessionary fares for school children.


What are we doing next?

In the long term, Transport for London is considering the West London Orbital railway scheme. This is an extension to the London Overground that would improve rail connectivity across West and North-West London, making it easier to travel around Ealing and to neighbouring boroughs directly without travelling towards Central London.

Reducing emissions from public transport is a key step to making transport in Ealing more sustainable. Buses can make significant contributions to local concentrations of air pollutants, particularly where older diesel models are used. TfL have set a target of operating a zero-emission fleet by 2030, which will have direct benefits for air quality and climate change.

The key air quality impacts associated with the rail networks include emissions from older diesel trains, and emissions associated with construction and development. Many of the rail networks have already transitioned to electric, and construction and demolition impacts are managed through the planning process (see Section 6).

There are a number of tools available to help you plan your journeys in a way that reduces your air pollution footprint and limit your exposure:

 Where to find more information		
Tool / Resource	Description	Link
Council Website	<p>Travel options such as public transport and parking.</p> <p>Clean air route finder.</p> <p>If you live in London and do not have access to off-street parking, you can contact your borough and suggest that an on-street electric vehicle charge point is delivered near your home.</p>	<p>https://www.ealing.gov.uk/info/201173/transport_and_parking</p> <p>https://ealingair.org.uk/AirQuality/Default.aspx</p> <p>https://www.londoncouncils.gov.uk/our-key-themes/transport/electric-vehicle-charging/suggest-location-ev-charge-point</p>
Transport for London (TfL)	<p>The TfL STARS programme helps schools to commit to more active, safe and sustainable travel.</p> <p>A variety of Ealing-specific sustainable travel advice and information sources can be found through the TfL website²⁸.</p>	<p>https://stars.tfl.gov.uk/</p> <p>https://tfl.gov.uk/info-for/boroughs-and-communities/ealing</p>
School Run Travel Apps	<p>There are several school-run travel apps which help to find healthier, active and sustainable travel routes to school, for example, by facilitating carpooling, finding routes with less traffic, tracking kids' journeys, or coordinating walking and cycling groups; e.g. SchoolRun or HomeRun.</p>	<p>https://schoolrunsafe.com/</p> <p>https://www.homerun-app.com/</p>

28 Ealing TfL, <https://tfl.gov.uk/info-for/boroughs-and-communities/ealing>

 Where to find more information		
Tool / Resource	Description	Link
Let's Go Southall	The <i>Let's Go Southall</i> programme aims to encourage and support residents to be more physically active. Southall is one of 12 areas across the country that has been selected for a Sport England programme to help people to choose more active lifestyles.	https://letsgosouthall.org.uk/

4.7 Ealing Spotlight: Acton

The Area

Once an ancient village, Acton, meaning “oak farm”, is now a retail and commerce hub. It is located on the eastern side of the Borough of Ealing, and is the closest district to Central London. Acton is a large residential suburb, home to several schools and the South Acton estate. Acton has exceptional public transport connectivity with seven stations: one National Rail, two London Overground, and four London Underground.

The population of Acton – inclusive of East Acton, North Acton, South Acton, and Acton Green – is approximately 67,000. The top three ethnic groups from the 2011 census are White (61%), Asian/Asian British (14%), and Black (12%).

Key Emission Sources

As the closest district to Central London, levels of air pollution tend to be higher in Acton than the rest of Ealing. The **A40 dual carriageway** that cuts through Acton allows traffic through to central London and is subject to periods of congestion.

There is also a retail and commerce hub along Uxbridge Road, which contributes to congestion and elevated air pollution.



The Acton Goods Yard on Horn Lane has historically released high levels of dust, leading to annual average PM₁₀ concentrations on Horn Lane exceeding the UK National Air Quality Objective.

Local Actions to Improve Air Quality

Transport emissions:

As of the 25th of October 2021, the area east of the A406 ring road, including all of Acton, is within the London ULEZ. This means that vehicles within Acton need to meet specific emission standards or pay a daily charge to drive. The ULEZ is designed to encourage a shift to alternative forms of travel, including active travel, public transport, and the use of cleaner vehicles. On the 29th of August 2023, the ULEZ will be expanded to cover all of Ealing.



Industrial emissions:

In addition to the ULEZ, a Low Emissions Strategy²⁹ was developed for Acton Goods Yard to reduce particulate matter concentrations around Horn Lane. The aim of the strategy is to encourage the site operators to employ best practices, in order to reduce emissions and improve air quality.

Public awareness:

During London Climate Action Week in July 2021 the London Transport Museum in Acton held public events to show how modern transport technology is transforming sustainable travel around Central London. The events were held as part of the wider 18-month Climate Crossroads³⁰ programme to engage the community and raise public awareness of sustainable cities, travel, transport, and greener skills for the future.



29 Low Emissions Strategy, Acton Goods Yard, Horn Lane, Acton. 2015. https://www.londonair.org.uk/london/reports/LB_Ealing_Low_Emissions_Strategy_Acton_Goods_Yard_Horn_Lane_Acton.pdf

30 Climate Crossroads, London Transport Museum <https://www.ltmuseum.co.uk/about/climate-crossroads>

5

Wood burning and improving indoor air quality

In this section

5.1 Ealing's Smoke Control Area

5.2 What can I do?

5.3 What are we doing next?

5 Wood burning and improving indoor air quality

People in urban areas spend up to 90% of their time indoors³¹. The quality of air we breathe indoors is affected by many factors, including both outdoor air pollution and activities inside the home, including burning solid fuels, tobacco smoke and cooking.

Solid fuels are by far the most polluting method of domestic heating, causing both indoor and outdoor air pollution. The main pollutant emitted by burning solid fuels like wood is ultra-fine particulate matter, PM_{2.5}. PM_{2.5} is widely acknowledged as being the air pollutant with the greatest impact on human health.

Emissions of PM_{2.5} from domestic wood burning in London have increased by 35% between 2010 and 2020, and as a result domestic wood burning is one of the most important sources of PM_{2.5} pollution in Ealing, accounting for 20% of all emissions. A 2016 government survey found that 7.5% of London's homes burned wood.

5.1 Ealing's Smoke Control Area

The whole of Ealing is a Smoke Control Area. This means that:

- Burning coal, wood or other non-authorized fuels on open fires is banned;
- There's a limit on how much smoke you can release from a chimney;
- Burning smokeless fuels is allowed.

Ealing Council has a responsibility to investigate any complaints about smoke that might constitute a "statutory nuisance". Offenders can be fined £5,000 (or up to £20,000 for industrial, trade or business premises).

31 <https://www.ncbi.nlm.nih.gov/pubmed/11477521>



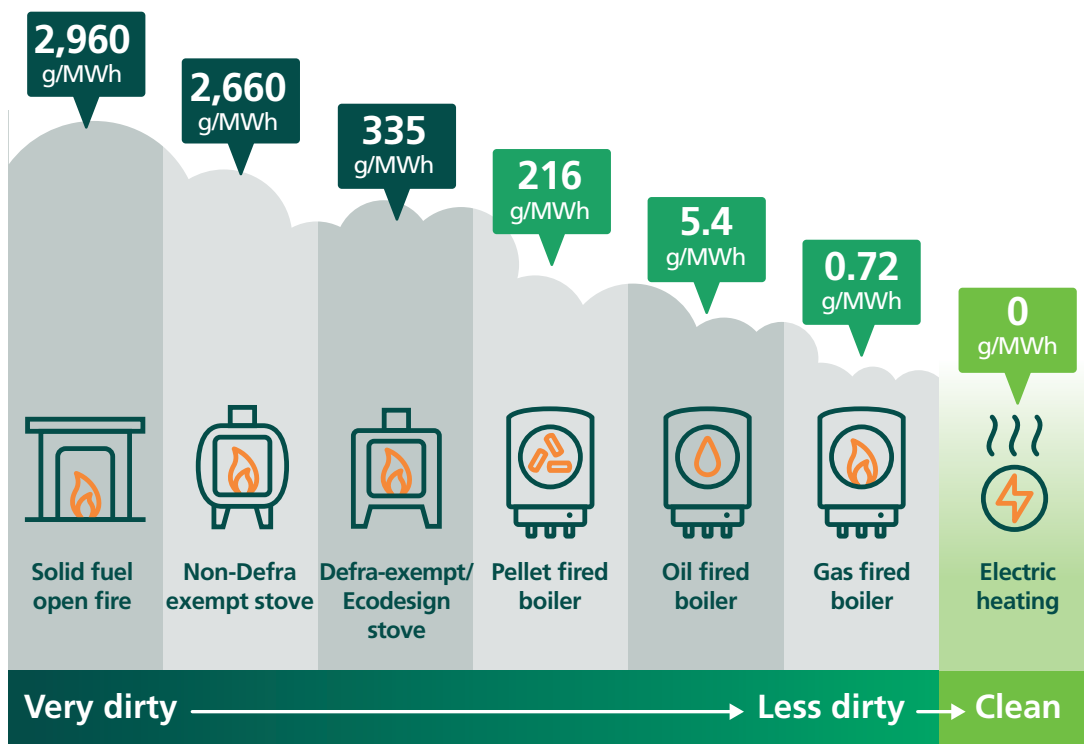
5.2 What can I do?

The best way to reduce your exposure is to stop burning or reduce the amount you burn.

If you are going to burn, what you burn and how you burn it can make a big difference to the pollution it creates. Emissions from fireplaces can be reduced **but not eliminated** by:

- Burning dry fuel rather than wet wood, as this emits less pollution. The Ready-to-Burn scheme certifies less-polluting wood;
- Burning in an Ecodesign stove rather than on an open fire (which is banned in Ealing);
- Not burning construction wood or painted wood, which can contain harmful metals;
- Ensuring that your stove is well-maintained.

The relative PM_{2.5} emissions from domestic heating methods³²




³² Chief Medical Officer's annual 2022 report: Air Pollution https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1124738/chief-medical-officers-annual-report-air-pollution-dec-2022.pdf

5.3 What are we doing next?

Wood burning stoves pose a particular challenge for local authorities across the country, as they can make significant contributions to background levels of air pollution, but can be difficult to regulate. Our target is to ensure that 100% of smoke complaints are investigated within 48 hours.

2022 saw the introduction of the Ecodesign Regulations, which require all new solid fuel burning room heater appliances to have been independently tested to show that they meet minimum seasonal efficiency standards and maximum emission limits for a range of pollutants. This is expected to have widescale benefits for background air quality levels.

Ealing Council have set plans for action to improve the energy efficiency of housing in the area, which also improves indoor air quality. As housing is Ealing's largest source of carbon emissions, improving energy efficiency is a key priority for the borough.

 Where to find more information		
Tool / Resource	Description	Link
Smoke control areas rules	Rules for smoke control areas, including information on penalties	https://www.gov.uk/smoke-control-area-rules

6

Reducing the impact of new and existing developments

In this section

6.1 What are we doing now?

6.2 What are we doing next?

6.3 Ealing Spotlight: Southall

6 Reducing the impact of new and existing developments

Ealing has delivered one of the most ambitious house-building programmes in London and we will have built 2,700 genuinely affordable homes for people across the borough by 2022. The council plans to continue this ambitious programme going forward.

However, new developments can introduce new emission sources and put additional pressure on areas that are already experiencing heightened air pollution levels. Demolition and construction activities, if not managed appropriately, can also result in emissions of particulates and dust, and involve the use of plant machinery. However, if planning is tackled correctly, it can improve air quality, create sustainable urban locations, improve health, and provide a better living environment. Local planning or placemaking can be used to improve and maintain good air quality.



6.1 What are we doing now?

Ensuring the impacts of new developments are appropriately assessed – The council’s Sustainable Design and Construction Supplementary Planning Guidance³³ supports developers to achieve sustainable development, including through ensuring the developments are air quality neutral for buildings and transport. An air quality assessment would normally be expected for various types of development, for example proposals that will result in increased local vehicle trips or congestion, or those with a large number of parking spaces³⁴.

Controlling emissions of odours and dust – To manage odours and dust from construction and commercial premises, the council follows the Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance³⁵. This provides detailed guidance to reduce emissions of dust, PM₁₀, and PM_{2.5} from construction and demolition activities.

Reducing emissions from plant machinery – Non-road mobile machinery (NRMM) includes any mobile machine or vehicle that is not solely intended for carrying passengers or goods on the road. NRMM, particularly from the construction sector, is a significant contributor to London’s air pollution. Emissions standards for diesel powered machinery are gradually getting tighter for NRMM in London, and by January 2040 only zero-emission machinery will be allowed.

Development needs to be sustainable, accessible, and equitable, to help reduce emissions

6.2 What are we doing next?

Ealing is expected to see ongoing development in the coming years, both to ensure improvements for local communities and to support forecast growth in the number of residents. Ealing are currently developing a new Local Plan, which will set out the vision for the borough and describe the safeguards to be adopted to ensure new development does not inhibit the council’s air quality objectives.

33 Sustainable Design and Construction Supplementary Planning Guidance, https://www.london.gov.uk/sites/default/files/gla_migrate_files_destination/Sustainable%20Design%20%26%20Construction%20SPG.pdf


34 Air Quality and Pollution, https://www.ealing.gov.uk/download/downloads/id/1135/air_quality_and_pollution_supplementary_planning_guidance.pdf


35 Dust and odours from commercial premises, https://www.ealing.gov.uk/info/201199/air_quality/2057/dust_and_odours_from_commercial_premises

The council has also pledged within its manifesto to:

- Launch a new tax on developers, and work towards raising at least £12 million per year to fund new infrastructure, education, health and community facilities.
- Create a new Local Plan to give residents and businesses confidence that our borough can change for the better in the coming decade.
- Implement a “retrofit first” principle for council buildings and deliver zero-carbon development as standard whilst ensuring any carbon offset payments that do occur are invested locally to make our borough greener.
- Resist any attempts by national government to reduce the level of power held by local authorities to decide on matters relating to planning.

We will continue to campaign for greater powers to regulate polluting industries, and for a Clean Air Act that gives us the tools we need to tackle poor air quality, smells and pollutants from industry and new developments.

 Where to find more information		
Tool / Resource	Description	Link
RE:NEW and RE:FIT programmes	Government-led programmes to support energy efficiency at work and home.	https://www.london.gov.uk/what-we-do/environment/energy/renew-0 https://localpartnerships.org.uk/our-expertise/re-fit/
The Energy Saving Trust	The Energy Saving Trust helps households, businesses, and organisations to save energy.	https://energysavingtrust.org.uk/
Green Deal	The Green Deal is a government scheme, introduced in October 2012, designed to help homeowners and tenants to increase the energy efficiency of their homes.	https://www.gov.uk/guidance/getting-a-green-deal-information-for-householders-and-landlords

 Where to find more information		
Tool / Resource	Description	Link
Green Homes Together	A Community Interest Company formed by a consortium of 15 local authorities, including the London Borough of Ealing, and the National Energy Foundation. Green Homes Together is your local Green Deal Provider, in partnership with Ealing Council, offering householders energy saving advice and support.	https://www.greenhomestogether.org.uk/
The Big London Energy Switch	Ealing is part of the Big London Energy Switch (BLES). It brings people together to use collective buying power to secure better deals on their gas and electricity bills. Anyone who pays a bill can take part, including tenants and customers on pre-pay meters.	https://biglondonenergyswitch.co.uk/

6.3 Ealing Spotlight: Southall

The Area

Southall is a vibrant region in the south-west of the Borough of Ealing. It is a mixed-use area with a large residential population, a bustling commercial area along Southall Broadway on Uxbridge Road, and an industrial zone.

There is also a large area of redevelopment at the former Southall Gasworks site, known as The Green Quarter. This is a major regeneration scheme to convert the site into a large mixed development for affordable housing, commerce, schools, public parkland, and a central park. Due to its historical use as a gasworks and chemical works site from the 19th century until the late 1960s, there was contamination of the soil which has since been treated in a soil hospital to make the land safe and suitable for its new uses, including housing.





Being a South Asian hub since the 1950s, Southall is often called Little Punjab or Little India. The Gurdwara Sri Guru Singh Sabha is one of the largest Sikh temples outside of India. The population of Southall – inclusive of Dormers Wells, Lady Margaret, Norwood Green, Southall Broadway, West Southall, and Southall Green – is approximately 54,000, and the average age is 35. The top three ethnic groups from the 2011 census are Asian/Asian British (64%), White (16%), and Black (12%). Two thirds of the Asian/Asian British population are Indian.

Local Actions to Improve Air Quality

In recognition of the scale of the development and the potential impact of the scheme on future emissions of air pollutants and greenhouse gases, the council commissioned the preparation of a Low Emissions Strategy (LES) for The Green Quarter in 2019. The LES aims to set a course for the development to minimise pollutant emissions and achieve net zero-carbon emissions by 2050.

In response to concerns raised by local residents, the council have commissioned an **independent air quality monitoring survey** around the site and appointed a dedicated Environmental Health Officer to respond to issues raised by the local community. Near real-time data is available at airqualityengland.co.uk. Further monitoring sites will be added in the coming months as part of Defra funded air quality monitoring project in and around schools. We have also commissioned **independent soil monitoring** on the site. The first results are now available.

The council encourages residents to report air quality concerns³⁶. All reports are investigated through site visits from council officers based in Southall, and any necessary action is taken to mitigate the concerns, including stopping works during hot weather, and covering stockpiles.

Other local Southall development actions include the regeneration of the Havelock estate³⁷. The £1 million project is refurbishing empty garages in the Willowbrook blocks to create new community facilities. The project was issued in response to resident complaints about the quality of life on the estate, namely poor environmental quality, anti-social behaviour, and a lack of facilities for young people. The redevelopment will increase access to local green space for healthy outdoor activities, and improve local air quality.

36 Southall Gasworks https://www.ealing.gov.uk/info/201283/our_neighbourhoods/2613/southall_gasworks

37 Ealing Council, 2022. New community facilities for Southall's Havelock estate https://www.ealing.gov.uk/news/article/2163/new_community_facilities_for_southalls_havelock_estate



7

Green infrastructure

In this section

7.1 What are we doing now?

7.2 What are we doing next?

Green infrastructure

Green infrastructure includes the creation of more natural spaces, better management of existing green spaces, and technology such as “green screens” where planted fences screen out airborne pollution. During the Covid-19 restrictions, we have all appreciated our local parks and green spaces more than ever.

Ealing’s Greenspaces Strategy³⁸ highlights the benefits of improving green infrastructure for local biodiversity, such as birds and pollinators, and local residents alike.

By providing space for recreation and being close to nature, green spaces have been shown to benefit physical and mental wellbeing. High quality green spaces have also been shown to have a positive impact upon property prices, and are good for business. Meanwhile, the level of protection green spaces provide by improving air quality and mitigating against the impacts of climate change also have economic value. Improved green spaces can encourage people to opt for active travel such as walking and cycling.

Planting street trees contributes to the council’s plans for Sustainable Drainage Systems (SuDS), which can be used to mimic natural drainage processes to reduce surface water run-off reaching traditional piped drainage, and can provide water quality improvement through settlement or biological breakdown of pollutants³⁸.

38 Ealing Greenspaces Strategy 2012-2017, https://www.ealing.gov.uk/downloads/download/2459/ealing_greenspaces_strategy_2012-2017

39 Ealing’s transport strategy 2019-2022, https://www.ealing.gov.uk/downloads/download/5418/ealings_transport_strategy_2019-2022

7.1 What are we doing now?

We have planted 37,000 trees in Ealing in the 4 years from 2018 to 2022. An £830,000 River Brent restoration project with Thames21 has added flood resilience and improved habitats, to encourage greater biodiversity along the river corridor.

Ealing residents regularly volunteer their time to improve spaces where they live, including the greening of traffic islands and tree pits, and the creation of community gardens. In the Mill Hill Park conservation area of South Acton, a group of residents continue to sustain a small pocket park in Crown Street that in the past was underused as a result of anti-social behaviour. With the support of their ward councillors and assistance of council officers, the group designed the planting plan and encouraged additional assistance from the community⁴⁰.

7.2 What are we doing next?

We want to build on the progress we have made in recent years by planting more trees, opening up more green space for people, and boosting our biodiversity. The council is prioritising the creation of new parks and open spaces, and has set an objective to achieve a 25% increase in tree canopy cover across Ealing by doubling the number of trees planted each year⁴¹. To achieve this objective, we have pledged to plant another 50,000 trees by 2026.

We will create 10 new parks and open spaces, give back to nature 800,000 m² (the same as 130 football pitches) through re-wilding and re-introducing wildlife, and pioneer 10 new community growing spaces in our housing estates and new developments.

The planning system includes a requirement for new developments to protect existing green spaces and identify and pursue new opportunities for green infrastructure. An example of this in action is the new Green Quarter development, which will provide 13 acres of new parkland and two new parks. The council will continue to use the planning system to ensure the provision of green spaces across the borough, and support local community greening projects.



40 Local Strategic Partnership (LSP) borough plan (2018-2022), https://www.ealing.gov.uk/downloads/download/5415/local_strategic_partnership_lsp_borough_plan

41 Ealing Council Climate and Ecological Emergency Strategy 2021-2030 https://www.ealing.gov.uk/downloads/file/15879/climate_and_ecological_emergency_strategy_2021-2030

 Where to find more information		
Tool / Resource	Description	Link
Ealing Council Website	Information on Parks and open spaces is provided through the Council's parks service.	https://www.ealing.gov.uk/info/201132/parks_and_open_spaces
The Tree Council	The Tree Council provides advice about planting new trees and hedges – of the right kind and in the right place.	https://treecouncil.org.uk/
Conservation Charities	Conservation charities such as the Royal Society for the Protection of Birds (RSPB) and Bumblebee Conservation Trust provide resources for how to support the environment in your local area and in your garden.	https://www.rspb.org.uk/birds-and-wildlife/advice/gardening-for-wildlife/ https://www.bumblebeeconservation.org/
Local Conservation Groups	<p>Local conservation groups and community gardens such as the Ealing Wildlife Group run local conservation projects and are often looking for volunteers.</p> <p>You can volunteer with local community conservation and wellbeing projects such as those organised through <i>do something good</i> or Ealing Volunteer Centre.</p>	https://ealingwildlifegroup.com/ https://ehcvs.org.uk/volunteering/ https://www.dosomethinggood.org.uk/volunteering

8

Raising awareness of air quality

In this section

8.1 What are we doing now?

8.2 What are we doing next?

8.3 Ealing Spotlight: Greenford

8 Raising awareness of air quality

Ealing residents have told us how important it is to have good quality, reliable information. This enables people to make informed decisions around how their own behaviour impacts air quality in Ealing, and how they can reduce the air pollution they or their family members are exposed to.



8.1 What are we doing now?

The council works with residents, schools, charities, community groups, the NHS, and decision makers in order to raise awareness about the sources and impacts of local air quality. Several initiatives have already been implemented in Ealing with the aim of increasing awareness around the issues of air quality and benefits of active travel. These include:

- Ealing Council has signed up to both the GLA's air pollution alerts and the airTEXT tool⁴². These provide the public with daily air pollution forecasts and information on reducing personal exposure to poor air quality.
- We are engaging with businesses, the voluntary sector and schools to raise awareness of air quality issues. Awareness raising is also being enabled through work with Integrated Care Partnership (ICP) partners and through development activity for the Health and Wellbeing Strategy 2023-28.
- The council is engaging with the community through the Shaping Ealing campaign, which allows residents, businesses, and others to contribute to the development of Ealing and the towns within it, by joining a dedicated conversation to put local priorities under the spotlight⁴³.
- The 'Let's Go Southall' programme aims to encourage and support residents to be more physically active. Southall is one of 12 areas across the country that has been selected for a Sport England programme to help people to choose more active lifestyles. One of the main messages to residents is that the smallest thing can make a huge difference to one's health and being more active now could improve quality of life⁴⁴.

Transparency into where the data is sourced from and the reasons behind government investment is essential for Ealing residents.

8.2 What are we doing next?

The council will continue to engage with local community groups on air quality issues, ensuring the council is listening to the views and concerns of local residents, and providing access to update and transparent information on current air quality and the steps being taken to improve it.

42 airText, <https://www.airtext.info/about>

43 Shaping Ealing, https://www.ealing.gov.uk/info/201282/shaping_ealing

44 Let's Go Southall, <https://letsgosouthall.org.uk/>

We are planning to incorporate high pollution alert service information into the Health Protection Forum and relevant severe weather response and planning forums. We are also working on awareness raising for airText and other air pollution alert services for primary care services. 42 schools in Ealing have achieved or are working towards TfL STARS accreditation.

8.3 Ealing Spotlight: Greenford

The Area

Greenford is a residential area in the north of the Borough of Ealing. It has a small town centre, with a diverse community. Key attractions in the area include Horsenden Hill, the highest point in the borough, and Ravenor Park.

The population of Greenford – inclusive of North Greenford, Central Greenford, and Greenford Broadway – is approximately 46,000, and the average age is 35. The top three ethnic groups from the 2011 census are White (46%), Asian/Asian British (32%), and Black (13%). Just under half of the Asian/Asian British population are Indian.



Key Emission Sources

Despite Greenford being a relatively residential neighbourhood, the area is transected by the A40 dual carriageway, which is a key traffic route between central London and Oxford. This road experiences regular periods of congestion and as a result, causes heightened concentrations of NO₂, PM₁₀, and PM_{2.5} in the area.

Regular periods of congestion are not helped by the low accessibility of public transport connectivity in Greenford. This is primarily due to there being only one London Underground and National Rail station in Greenford, so the average distance to the station is lengthened. Bus services are also relatively infrequent. This can be challenging to improve, because these public transport services are operated by external organisations.



Local Actions to Improve Air Quality

Ealing Council is focusing on raising awareness on the actions that local residents can take to personally improve air quality. This includes understanding the impacts of emissions from personal vehicles, and the benefits of sustainable active transport. Modal shift from personal vehicles to active and public transport through behavioural change will help to reduce the heavy congestion on the A40 dual carriageway that worsens air quality in Greenford.

In 2019, Ealing Council published The Ealing Transport Strategy,⁴⁵ which sets out several actions to encourage sustainable active travel. By 2041, Ealing Council aims for 80% of all journeys in the borough to be made by walking, cycling, and public transport.

Ealing Council is lobbying public transport operators to provide frequent, reliable, safe, affordable, and well-connected public transport to the community. This will reduce journey times and incentivise the switch from personal vehicles to public transport, thereby reducing vehicular emissions and improving air quality. The Greenford branch line is a significant project where Ealing Council is lobbying both the Department of Transport and the Mayor of London/TfL for frequency and service improvements on the Greenford branch line, including linking Greenford with the new Elizabeth Line.

Another way to incentivise public transport is to improve cycling infrastructure and safety, which is one of the key policy goals in the Ealing Transport Strategy. Cycling reduces the time spent travelling to stations. Policy actions include putting walking and cycling first in street design, as well as providing free cycling training in schools and to adults who live, work, or are educated in the borough.

⁴⁵ Ealing Transport Strategy 2019-2022 https://www.ealing.gov.uk/downloads/download/5418/ealings_transport_strategy_2019-2022

9

Monitoring and review

Monitoring and review

Monitoring and review is vital to track the performance of the actions set out in this Air Quality Strategy. The monitoring and review process will ensure we can respond to the air quality challenges in the borough in the most effective way possible.

Ealing Council will monitor, review, and regulate the measures discussed in this Strategy and the related Air Quality Action Plan to ensure the actions are achieving their aims and that Ealing is on track to achieve the National Air Quality Standards.

A combination of air quality monitoring data, and secondary data collected for each air quality action, will be used to monitor and evaluate the actions within the Air Quality Strategy. While monitoring air pollution concentrations provides an overview of air quality in Ealing, this does not provide information on how a particular action is performing or is contributing to any changes in air pollution. Therefore, indirect or secondary indicator data will also be used to track the progress of the Air Quality Strategy and actions within it. These types of indicators can also be more accessible when reporting to the public and other stakeholders.

The changes brought about by our actions can be compared with the original objectives, and a baseline where possible, to assess our performance. If actions are found to be underperforming, remedial measures can be implemented to get the actions back on track.

Monitoring and review is a continuous process of data gathering, assessment against objectives, and making changes to allow for improvement; therefore, the Air Quality Strategy will be reviewed and reported on at regular intervals, keeping stakeholders up to date with progress and any changes being made. This Air Quality Strategy will be subject to an in-depth review every five years to assess progress and adjust the air quality improvement goals for Ealing as necessary. The detailed actions in the Air Quality Action Plan will also be reviewed and updated every five years. Yearly updates on the Air Quality Strategy's progress will be provided in our Annual Status Reports, which can be found on the [EalingAir website](#)².

10

Other resources on air quality

In this section

10.1 Information on current air quality levels

10.2 Health and wellbeing resources

10 Other resources on air quality


A list of key resources is presented here. These are divided into resources which provide further information on air quality, and tools to help you take action, relating to transport, planning, green infrastructure and climate.


10.1 Information on current air quality levels

There are several useful points of information to check for updates about the status of local air quality. The following documents and websites provide information about NO₂ and particulate matter in Ealing, and across the UK.



Resources providing further information on the status of air quality


 Where to find more information		
Tool / Resource	Description	Link
Air Quality Action Plan	The Air Quality Action Plan contains details of the measures the council will take to address exceedances of the UK National Air Quality Objectives for NO ₂ , and to reduce PM _{2.5} emissions.	https://www.ealing.gov.uk/downloads/download/4240/air_quality_action_plan_aqap
Annual Status Reports	Ealing publishes its latest air quality monitoring data annually in Annual Status Reports, reporting on general air quality trends, and discussing areas which exceed National Air Quality Objectives.	https://www.ealing.gov.uk/info/201199/air_quality
Ealing Air	The Ealing Air website includes general information about air quality in Ealing, and provides a clean air route planner to help you avoid pollution during your journeys.	https://ealingair.org.uk/
AirTEXT	airTEXT is a free tool providing air quality alerts 3-day forecasts of air quality, pollen, UV and temperature across Greater London. The forecasts are provided by Cambridge Environmental Research Consultants (CERC) with concentrations of four pollutants calculated. Schemes such as airTEXT have the potential to enable people within the borough to minimise their individual exposure to air pollutants.	https://www.airtext.info/

 Where to find more information		
Tool / Resource	Description	Link
London Air Quality Network / LondonAir app.	<p>Kings College London runs the London Air Quality Network on behalf of the London Boroughs, which provides a wealth of online air quality information and forecasting, including live data from the council's automatic air quality monitoring stations. Its website provides access to information about air pollution in every London Borough and some of the surrounding local authorities. Information about current air pollutant concentrations can also be accessed through the LondonAir app.</p>	https://www.londonair.org.uk
CityAir app	<p>The City of London Corporation has developed a free smartphone app which helps Londoners lower their impact on, and exposure to, air pollution.</p>	https://www.cityoflondon.gov.uk/services/environmental-health/air-quality/cityair-app
The Air Pollution Research in London (APRIL) network	<p>The APRIL network does not provide data about air pollutants in Ealing, but aims to bring together scientists, policy makers and the wider community. The APRIL network identifies priority areas for research to improve air quality in London and other major cities, supports the development of new scientific research and communicates the latest research findings. APRIL holds regular meetings, generally hosted by the Greater London Authority (GLA) at City Hall.</p>	https://aprilresearchlondon.wordpress.com/


10.2 Health and wellbeing resources

The following resources provide information about the impacts of air quality on health and wellbeing.

Resources providing further information on health and wellbeing relating to air quality

 Where to find more information		
Tool / Resource	Description	Link
Public Health England	Provides information about the health impacts of air pollution.	https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution
London Councils	Provide information about air pollution and the effects on our health.	https://www.londoncouncils.gov.uk/node/33227
Mayor of London	The Mayor of London has provided a guide for public health professionals regarding air quality in Ealing.	https://www.london.gov.uk/sites/default/files/air_quality_for_public_health_professionals_lb_ealing.pdf
Ealing's Health and Wellbeing Strategy	The Ealing Health and Wellbeing Strategy is a long-term way of meeting the needs of the local population. The 2023-28 strategy is being developed with a focus on addressing inequalities, to be launched in early 2023.	https://www.ealing.gov.uk/downloads/download/3755/health_and_wellbeing_strategy

Resources providing further information on health and wellbeing relating to climate change

 Where to find more information		
Tool / Resource	Description	Link
The Climate Risk Map	The Climate Risk Map produced by the Mayor of London presents exposure and vulnerability to climate change across Greater London.	https://www.london.gov.uk/what-we-do/environment/climate-change/climate-adaptation/climate-risk-map
The Carbon Trust	Organisations such as The Carbon Trust help business and the public sector cut carbon emissions.	https://www.carbontrust.com/
Act for Ealing	#ACTFOREALING is building a collaborative online space for organisations and individuals in Ealing to participate in a conversation about climate action in the borough. This space will share resources, events and information which cover the breadth of climate actions needed to reach the net zero target by 2030.	https://actforealing.org/