



Resources and Public Realm Scrutiny Committee - SUPPLEMENTARY AGENDA

Wednesday 4 December 2019 at 6.00 pm
Conference Hall - Brent Civic Centre, Engineers Way,
Wembley, HA9 0FJ

Membership:

Members

Councillors:

Kelcher (Chair)
Kansagra (Vice-Chair)
Aden
S Choudhary
Gbajumo
Johnson
Kabir
Mashari
Nerva
Stephens

Substitute Members

Councillors:

Afzal, S Butt, Ethapemi, Hector, Knight, Shahzad,
Ketan Sheth and Thakkar

Councillors:

Colwill and Maurice

For further information contact: Kunwar Khan, Governance Officer
Email: Kunwar.Khan@brent.gov.uk, 020 8937 2037

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The press and public are welcome to attend this meeting

Notes for Members - Declarations of Interest:

If a Member is aware, they have a Disclosable Pecuniary Interest* in an item of business, they must declare its existence and nature at the start of the meeting or when it becomes apparent and must leave the room without participating in discussion of the item.

If a Member is aware they have a Personal Interest** in an item of business, they must declare its existence and nature at the start of the meeting or when it becomes apparent.

If the Personal Interest is also significant enough to affect your judgement of a public interest and either it affects a financial position or relates to a regulatory matter then after disclosing the interest to the meeting the Member must leave the room without participating in discussion of the item, except that they may first make representations, answer questions or give evidence relating to the matter, provided that the public are allowed to attend the meeting for those purposes.

***Disclosable Pecuniary Interests:**

- (a) **Employment, etc.** - Any employment, office, trade, profession or vocation carried on for profit gain.
- (b) **Sponsorship** - Any payment or other financial benefit in respect of expenses in carrying out duties as a member, or of election; including from a trade union.
- (c) **Contracts** - Any current contract for goods, services or works, between the Councillors or their partner (or a body in which one has a beneficial interest) and the council.
- (d) **Land** - Any beneficial interest in land which is within the council's area.
- (e) **Licences** - Any licence to occupy land in the council's area for a month or longer.
- (f) **Corporate tenancies** - Any tenancy between the council and a body in which the Councillor or their partner have a beneficial interest.
- (g) **Securities** - Any beneficial interest in securities of a body which has a place of business or land in the council's area, if the total nominal value of the securities exceeds £25,000 or one hundredth of the total issued share capital of that body or of any one class of its issued share capital.

****Personal Interests:**

The business relates to or affects:

- (a) Anybody of which you are a member or in a position of general control or management, and:

- To which you are appointed by the council;
- which exercises functions of a public nature;
- which is directed is to charitable purposes;
- whose principal purposes include the influence of public opinion or policy (including a political party or trade union).

- (b) The interests of a person from whom you have received gifts or hospitality of at least £50 as a member in the municipal year;

or

A decision in relation to that business might reasonably be regarded as affecting the well-being or financial position of:

- You yourself;
- a member of your family or your friend or any person with whom you have a close association or any person or body who is the subject of a registrable personal interest.

Supplementary Agenda

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To receive the report of the Air Quality Scrutiny Task Group.

Date of the next meeting: Wednesday 29 January 2020



- Please remember to set your mobile phone to silent during the meeting.
- The meeting room is accessible by lift and seats will be provided for members of the public.

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 Brent	Resources and Public Realm Scrutiny Committee 4 December 2019
	Report from Strategic Director of Customer and Digital Services
AIR QUALITY SCRUTINY TASK GROUP REPORT	

Wards Affected:	All
Key or Non-Key Decision:	Non Key
Open or Part/Fully Exempt: <small>(If exempt, please highlight relevant paragraph of Part 1, Schedule 12A of 1972 Local Government Act)</small>	Open
No. of Appendices:	One: Appendix 1 - Brent Breathes - Report of the Resources and Public Realm Scrutiny Committee: Air Quality Scrutiny Inquiry
Background Papers:	None
Contact Officer(s): <small>(Name, Title, Contact Details)</small>	Michael Carr - Senior Scrutiny Policy Officer michael.carr@brent.gov.uk

1.0 Purpose of the Report

- 1.1 The purpose of this report is to present the Air Quality Scrutiny Task Group Report for adoption by the Committee (attached at Appendix 1).

2.0 Recommendation(s)

- 2.1 That the Air Quality Scrutiny Report and recommendations be adopted and referred to the Cabinet for consideration.

3.0 Detail

- 3.1 The Resources and Public Realm Scrutiny Committee established a Scrutiny Task Group to consider the issue of Air Quality in Brent in July 2019, in accordance with Part 4 paragraph 5 of the Council Constitution. The Task Group has now concluded and has agreed a report and recommendations for adoption by the Committee and referral to Cabinet for consideration.
- 3.2 The report includes ten recommendations to Brent Council, which are summarised on page 4 of the report.

4.0 Financial Implications

- 4.1 It is envisaged that any financial implications arising from the recommendations will be contained within existing budgets.
- 4.2 Any requests for additional funding, or savings arising out of its implementation, will be managed through the normal budgeting setting process.

5.0 Legal Implications

- 5.1 There are no legal implications for the purposes of this report.

6.0 Equality Implications

- 6.1 There are no equality implications for the purposes of this report.

7.0 Consultation with Ward Members and Stakeholders

- 7.1 The Chair of the Scrutiny Task Group has been consulted on this cover report. The main report at Appendix 1 list the stakeholders that have been consulted and involved in the scrutiny inquiry.

8.0 Human Resources/Property Implications (if appropriate)

- 8.1 There are no Human Resources/property implications for the purposes of this report.

Report sign off:

Peter Gadsdon
Strategic Director of Customer and
Digital Services

Brent Breathes

**Report of the Resources and Public Realm Scrutiny
Committee: Air Quality Scrutiny Inquiry
December 2019**

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Chapter 1 - About this scrutiny inquiry

List of recommendations

- **Recommendation 1:** That the Council update the Air Quality Strategy, and set out an aspiration to meet World Health Organisation limits on air pollution, commit to addressing inequality in air quality and complement the wider climate emergency agenda. We should also lobby national government where we are unable to effect change ourselves.
- **Recommendation 2:** That the Council, in consultation with Transport for London and the Football Association, agree a strategy to reduce the air quality impact of non-resident car usage in Brent.
- **Recommendation 3:** That the Council set up a Green Brent Partnership: a forum with organisations impacting air quality in Brent – including the private sector, community organisations and campaign groups – to agree shared targets to improve air quality locally. We should also lead by example by taking steps to reduce the air quality impact of Brent Council's own activities.
- **Recommendation 4:** That the Council closely monitor and review the air quality impact of current policies, most particularly the Ultra-Low Emission Zone, and consider implementing and/or lobbying for stronger measures if necessary. It should also keep the provision of air quality monitoring sites under constant review.
- **Recommendation 5:** That the Council make the delivery of healthy streets a central corporate and political priority across the borough, working closely with local residents to expand the number of healthy streets locally.
- **Recommendation 6:** That the Council outline, publish and consult on a clear strategy for engagement with Transport for London on active travel initiatives – including the planned Willesden-Wembley Cycle Superhighway, measures to improve public transport provision and any future initiatives to improve accessibility over the North Circular.
- **Recommendation 7:** That the Council expand the number of initiatives for dealing with the air quality impact of housing and the built environment, and engage closely with experts to consider further steps as new evidence and technology emerges.
- **Recommendation 8:** That the Council continue to promote green space as a way of supporting active travel, and because of its wider benefits to health, the climate and biodiversity, but ensure that measures to improve greening are not promoted as a alternative to dealing with the underlying causes of poor air quality.
- **Recommendation 9:** That the Council continue to promote measures to improve air quality in our schools, and where possible enhance and expand on existing initiatives. It

should work in partnership with schools and students to agree a shared approach to improving air quality in the borough.

- **Recommendation 10:** That the Council, working with the health sector, statutory partners and Brent's public health team, spearhead a public health awareness and behavioural change campaign about air quality. The local NHS should also play its full part in delivering this, and lead by example in the measures they take to improve air quality.



Foreword from the Chair

To whom it may concern,

In July 2019, my fellow Scrutiny Inquiry members and I were honoured to have been appointed by Brent Council's Resources and Public Realm Scrutiny Committee to serve on a Scrutiny Inquiry into air quality in our borough. After six months of work, it is a pleasure to present the results of our investigations, and to present recommendations on what more the Council needs to do to improve air quality in Brent.

Poor air quality is the greatest environmental risk to ill health in the UK, and the fourth-greatest threat to public health after cancer, heart disease and obesity.¹ A shocking proportion of UK deaths – some 8% – are linked to air pollution in some way.² We should be candid in accepting that for far too long, successive governments, private companies and regulators have at best neglected this public health crisis; and at worst wilfully misrepresented the evidence (as we now know to be the case with many car manufacturers). National and local policies have simply not kept pace with advancements in the scientific understanding of the harmful health effects of poor air quality; and given the scale of impact air quality has on public health, the public health sector has invested far too little energy and resources in raising awareness about the problem.

We must act urgently and decisively to redress this imbalance. Brent's own air quality challenges are by no means unique to the borough, and the issues we face are similar to those of many other London boroughs – most especially those, like us, which straddle inner and outer London, with the heavily-polluting North Circular in-between. But the challenges we face are nonetheless considerable, with Friends of the Earth research suggesting four of the ten most polluting areas in London are in Brent.³ Across the borough as a whole, levels of Nitrogen Dioxide breach EU legal limits, and whilst levels of Particulate Matter (PM) 2.5 and PM10 are within *EU* air pollution limits, some parts of the borough exceed the more stringent *World Health Organisation* limits for PM (see Chapter 2).

We know from our day-to-day engagement with Council Officers, Cabinet Members and other Councillors how seriously this issue is taken in the borough, and the scrutiny inquiry is supportive of the policies Brent has already implemented to address this. We particularly support the Council's diesel surcharge, its School Streets pilots and its exploratory work on Low Emission Zones. At a London-wide level, the October 2021 extension of the Ultra-Low Emission Zone to the border of the North Circular will dramatically improve air quality in Brent, and we encourage the Council to fully support this initiative, work with Transport for London to raise awareness about

it and lobby strongly for the Government to contribute towards scrappage and trade-in schemes for affected residents and businesses.

However, much more can and should be done, especially in light of the Council's recent declaration of a climate and ecological emergency. In order to explore this in further detail, the scrutiny inquiry has spent the past six months speaking to dozens of experts and key stakeholders, and reviewing the latest evidence. We have also commissioned five reports from the Council to understand more about air quality in the borough, and attended a number of public meetings to gather further evidence. A full list of witnesses engaged with, reports commissioned and meetings attended is contained in Appendix A and B of this report.

This report sets out the results of our work, and is split into nine chapters. The first two chapters set out information on this Scrutiny Inquiry (Chapter 1) and a situation analysis of current air quality issues in Brent, in the context of the wider issues in the UK and London (Chapter 2). The succeeding chapters of this report then review what more Brent needs to do to address air quality in six key areas: reviewing the objectives of Brent's Air Quality Action Plan (chapter 3); personal car usage, freight and procurement (Chapter 4); public transport, walking and cycling (Chapter 5); housing, planning and the built environment (Chapter 6); schools, children and young people (Chapter 7); and engagement, awareness-raising and public health (Chapter 8).

The final chapter of this report (Chapter 9) brings together the results of this analysis, and makes ten key recommendations to the Council. The full details of these recommendations and how we propose to implement them are contained in the succeeding pages; but to summarise them at the outset, we recommend that the Council:

- 1. Commit to meeting and exceeding stronger World Health Organisation limits on air quality and addressing inequality in air quality in the borough.** We should accept that EU air quality limits are insufficient, and lobby national government for stronger standards, and more concerted action, where we are unable to effect change.
- 2. Set out a dedicated strategy to reduce non-resident car usage in the borough, most especially on Wembley Event Days and through the North Circular.** Amongst other things, the Council should agree a cap on non-resident parking on Event Days with the Football Association, and private commercial car parks in Brent for non-residents should charge a diesel surcharge along the same lines as Brent Council's diesel surcharge.
- 3. Establish a 'Green Brent Partnership: a forum to get the private sector to commit to reducing the air quality impact of their activities.** This partnership should work with companies to reduce the air quality impact of its freight and procurement processes, by integrating procurement and using low- and zero-emission vehicles for deliveries. The Council should also lead by example, setting a clear timetable and strategy for reducing the air quality impact of its own fleet.
- 4. Closely monitor the impact of policies on air quality, especially the Ultra-Low Emission Zone (ULEZ), and consider further measures if necessary.** The Council should support and raise awareness of the ULEZ and closely monitor its impact north of the North Circular.



5. **Make the delivery of healthy streets a key political and corporate priority, and work to support a 'modal shift' to increase the number of trips taken by walking, cycling and public transport.** The Council's air quality objectives cannot be met simply by shifting to electric vehicle usage: wherever possible, we also need to support more residents to walk, cycle and use public transport.
6. **Invest in better public transport provision, publishing and consulting on an engagement strategy with Transport for London on a range of public transport and active travel initiatives.** We should engage with residents and campaign groups at the earliest stage of development of these projects, by reviewing and expanding the remit of the Brent Public Transport Forum and Brent Active Travel Forum.
7. **Take further steps to reduce the air quality impact of housing and the built environment.** Amongst other things, the Council should consider investing the proceeds of its carbon offset funds in initiatives to reduce the air quality impact of household heating systems, review the heating standards in Private Rented Sector housing and improve the heating standards in its own council housing stock and those of registered providers.
8. **Promote the greater use of green space to improve the attractiveness of walking and cycling routes.** Green space alone cannot solve the air pollution crisis as this can only come with addressing the underlying causes of poor air quality, but it does still have a crucial role to play and have a range of wider benefits to mental health, biodiversity and CO2 levels.
9. **Enhance measures to improve air quality in our schools, including by looking to implement a presumption in favour of School Streets.** The Council must also set out a dedicated strategy to improve air quality in schools and school playgrounds next to main roads where School Streets cannot be implemented, and redouble efforts to ensure all schools have 'Gold' STARS accreditation and active travel plans.
10. **Lead in developing a public awareness and behavioural change campaign on air quality.** This campaign should particularly work to use the existing assets of the Council, Transport for London, the Football Association and others to more widely promote public health messages – for example by training a much wider range of staff and volunteers on Event Days to tackle engine idling, and by ensuring public health messages on air quality reach non-resident drivers along the North Circular.

We are pleased that the Resources and Public Realm Scrutiny Committee gave full formal endorsement to this report, and its recommendations, at its meeting on Wednesday 4 December 2019. We now look forward to each of these recommendations being considered by, and respond to, by Cabinet at the earliest opportunity in the New Year. In the meantime, we will be working to secure a motion on these recommendations at a forthcoming Full Council meeting. This will effectively update the previous Full Council motion declaring a climate emergency, to reflect Brent Council's political commitment to improving air quality in the borough.

In the intervening period, my fellow Scrutiny Inquiry members and I would welcome the opportunity to meet with Council Officers, Cabinet and the public to discuss this report further,

and to suggest timelines for its implementation and prioritise tasks. In light of the growing public interest in air pollution, global heating and the climate emergency, we think that the objectives of this report would best be implemented by establishing a dedicated team within Brent Council with sole and specific responsibility for acting on the climate emergency and air pollution crisis. This team should then lead a steering group within the Council, drawing expertise from every Council Department, in order to devise a cross-departmental strategy on this issue.

Finally, I would like to end by expressing my sincere thanks to all those who devoted their time and energy to the work of this Scrutiny Inquiry, including the many Officers in Brent Council who have supported our work and the many witnesses who have gone out of their way to provide evidence to this inquiry. I would like to particularly thank the six fellow Councillors and two co-opted organisations, Clean Air for Brent and Brent Cycling Campaign, who served with me on this scrutiny inquiry. Particular thanks must also go out to Michael Carr, Senior Policy and Scrutiny Officer in Brent Council, for his dedicated support and assistance throughout the course of our work.⁴

Yours faithfully,

Councillor Thomas Stephens

Chair, Air Quality Scrutiny Inquiry of Brent Council's Community and Wellbeing Scrutiny Committee

Councillor for Sudbury Ward

Scrutiny inquiry membership

This scrutiny inquiry benefitted from input and contributions from **six Brent Councillors** who served as members:

- **Cllr Elliot Chappell**, Willesden Green Ward
- **Cllr Lia Colacicco**, Mapesbury Ward
- **Cllr Janice Long**, Dudden Hill Ward
- **Cllr Michael Maurice**, Kenton Ward
- **Cllr Neil Nerva**, Queen's Park Ward
- **Cllr Thomas Stephens**, Sudbury Ward



In addition, we were proud that two external organisations within Brent, the **Brent Cycling Campaign** and **Clean Air for Brent**, agreed to be co-opted to serve on the scrutiny inquiry:





Whilst these two organisations were appointed in their own right to serve on the scrutiny inquiry, we would like to pay particular tribute to the individuals from these organisations who devoted many evenings to discussing the work of the task group, in our numerous meetings; in particular:

- **David Arditti**, Brent Cycling Campaign
- **Sarah Crawley**, Clean Air for Brent
- **Mark Falcon**, Clean Air for Brent
- **Charlie Fernandes**, Brent Cycling Campaign
- **Sylvia Gauthereau**, Brent Cycling Campaign
- **Robin Sharp CBE**, Clean Air for Brent

Finally, throughout the course of its work, the inquiry also benefitted significantly from support and assistance by Michael Carr, Senior Policy and Scrutiny Officer in Brent Council.

Terms of Reference

This scrutiny inquiry was established at Brent Council's Resources and Public Realm Scrutiny Committee on 3 July 2019, with the following Terms of Reference:

1. **Set out the latest evidence** on current issues with air quality in the borough, both across Brent as a whole and between different local communities and neighbourhoods.
2. **Review and scrutinise** the steps which Brent Council, its statutory partners and stakeholders operating across the borough which have an impact on air quality are taking to address these issues.
3. **Engage widely** with a diverse and representative range of local stakeholders across Brent on issues with air quality and the steps they would like to see taken on this issue.
4. **Review and scrutinise** relevant local, national and international examples of best practice in addressing air quality; and explore their applicability to Brent.
5. **Should it so wish, make recommendations** as to what Brent Council, its statutory partners and stakeholders across the borough who are impacting on local air quality to address these issues.

Research process and evidence base

Oral and written evidence

This scrutiny inquiry was conducted between July 2019 to December 2019 inclusive. During this process, the inquiry sought oral and written evidence from numerous stakeholders, including but not limited to:

- **A range of Departments within Brent Council**, including our environmental team, our roads and highways team, our housing department, our planning team, our schools department and our public health department.
- **Five Local Authorities** Birmingham City Council, the London Borough of Camden and the London Borough of Waltham Forest.
- **Local businesses and other organisations which impact on air quality in Brent**, including the Football Association at Wembley Park and Ace Café Wembley.

- **Academics with expertise in air quality**, particularly King's College London's Environmental Research Group (ERG).
- **Transport for London**, who provided a wealth of written evidence to us and held two meetings with us to discuss issues ranging from the importance of greening our bus network to how we can support walking and cycling and the Ultra-Low Emission Network.
- **Local schools within Brent which are taking action on air quality**, particularly Ark Franklin Primary Academy, who kindly arranged a site visit for the scrutiny inquiry. A number of other Brent schools were also approached as part of this inquiry.
- **Trade Unions with an interest and expertise in air quality**, namely the National Education Union and the Trade Union Clean Air Network.
- **A range of campaign organisations and pressure groups with interest and expertise in air quality**, including the London Cycling Campaign and Clean Air for London.
- **A number of external consultants with expertise in air quality and the environment**, who kindly donated their time free of charge to offer their expertise to the task group.

A wider appeal for evidence was also issued through a range of organisations. A full list of evidence sessions held and witnesses engaged with is included in Appendix A.

Reports commissioned by the scrutiny inquiry

In addition, the task group commissioned **five reports** from Brent Council officers to inform its work, covering the following topics:

- **Report 1:** A situation analysis of air quality in Brent, which was used to inform Chapter 1 of this report.
- **Report 2:** Progress update on Brent Council's 2017-2022 Air Quality Action Plan.
- **Report 3:** A partnerships report, detailing a range of local organisations within Brent which have an impact on air quality in the borough.
- **Report 4:** A further report providing answers to a range of questions asked by the scrutiny inquiry, including on the 'STARS' accreditation of Brent's schools, localised data on air quality hotspots in Brent and information on the air quality impact of planning developments approved in Brent.
- **Report 5:** A report from Brent Council's public health team on air quality in the borough.

The information from these reports has proven instrumental in informing our report, and is referenced and utilised throughout this report.

Literature review

Finally, throughout the course of its work, the inquiry reviewed evidence from a range of external sources, which are referenced throughout this report. A number of members of the public who heard about the work of the scrutiny inquiry through various channels also approached the Chair to provide evidence and comments. A full list of resources used is located in the references section at the end of this report.

Chapter 2 - Situation analysis

Defining 'poor air quality'

What are the harmful particles and gases in our air?

In recent decades, our understanding of the health impact of the air we breathe has changed dramatically. It is only relatively recently that we have begun to understand the true impact that a range of particles and gases which we are exposed to in our daily lives – many of which are invisible to the naked eye – can have on our own health, as well as that of our children and families.

For the purposes of this inquiry, we are concerned about the health impact of three compounds in particular:

- **Nitrogen dioxide (NO₂):** NO₂ is a gas produced by combustion processes, alongside Nitric Oxide (NO). Together they are often referred to as oxides of nitrogen (NO_x). The Department for Environment, Food and Rural Affairs estimates that 80% of NO_x emissions in areas where the UK exceeds NO₂ limits are caused by transport, and the largest source of these is “light duty diesel vehicles” (cars and vans).⁵

Exposure to NO₂ has been linked to irritations to the respiratory system that can cause inflammations to the airways. It is also associated with reduced lung development and respiratory issues in early childhood, and poor lung function into adulthood.⁶ Studies have also associated it with reduced life expectancy.⁷

- **Particulate Matter 2.5 (PM 2.5):** Public Health England states PM is “a generic term used to describe a complex mixture of solid and liquid particles of varying size, shape and composition.” Many are created by combustion processes, but a significant amount of PM is also created by non-combustion sources such as cars skidding and breaking along the road. Others are also created by ‘secondary’ sources: they mix with other particles in the air after they are produced.

PM comes in various shapes and sizes, and tends to be classified according to their diameter. PM_{2.5} are finer particles which are less than 2.5 microns (µm) in diameter. These are small enough for them to go deeper into the lung, and because of this, Public Health England says “the strongest evidence for effects on health is associated with PM_{2.5}.” When breathed in, these particles can get in the nose, throat and lungs or even enter the blood stream, and there is evidence that long-term exposure “increases mortality and morbidity from cardiovascular and respiratory diseases.”⁸

- **Particulate Matter 10 (PM 10):** Finally, PM₁₀ are larger particles that are less than 10 microns (µm) in diameter but more than 2.5 µm. Because of their larger size they are mainly deposited in the nose and throat, and are therefore associated with different poor health outcomes.



There are also a range of other particles and gases which can have an impact on our health. These include **Ozone**, **sulphur dioxide (SO₂)**, **ammonia (NH₃)**, **carbon monoxide (CO)**, ultra-fine particles less than 0.5 µm in diameter (**PM 0.5**) and **non-methane volatile organic compounds (NMVOCs)**. The health impact caused by these is also hugely significant, but they do not form the focus of our inquiry – partly because London now meets legal limits in these areas; partly because of a lack of local data on their prevalence; and partly because many of them are predominantly caused by factors outside of the Council's control, such as agriculture, energy industries and industrial processes.

Another gas, **Carbon dioxide (CO₂)**, is also worth highlighting. CO₂ is not like the compounds above because in the levels it is currently breathed in in Brent, it does not have a direct health impact on people in the borough. However, it of course has a very significant *indirect* impact, because large amounts of CO₂ create a 'greenhouse gas' effect and contribute to global heating. The scrutiny inquiry recognises that measures Brent Council takes to combat poor air quality need to complement the wider national and international climate emergency and environmental agenda. This is a theme we will return to later on in this report.

It is worth underlining that the evidence on the health impact of poor air quality is constantly being updated, and the scrutiny inquiry had the opportunity to discuss the latest evidence when we held an evidence session with Dr Ian Mudway, Lecturer in Respiratory Toxicology at the King's College London Environmental Research Group. The mass of particulates themselves is not actually the best way of determining the health impact of poor air quality: it is about the health impact of the particular elements and compounds in the particles. A better way of measuring the health impact of air quality would be to look at each individual harmful elements and compounds created by each source, and to analyse the health impact of each of these individual things.⁹

At present, however, the way we measure air quality both in the UK and around the world is not sophisticated enough to reflect this latest evidence. Measurements of air quality taken by local and national government tend to focus on the overall mass of Particulate Matter created, but as science increasingly comes to understand the damage caused by the elements within this particulate matter we will need – like the rest of the world – to devise a more sophisticated approach to measurement. Brent Council must ensure it regularly engages with experts to stay updated on the evidence, and that we play our part in pressing national government to invest in and develop more sophisticated ways of measuring air quality impact. We reflect this important lesson in one of our recommendations (Recommendation 1).

What is the 'safe limit' for air pollution?

During the course of our work, the scrutiny inquiry came to realise there is a great deal of confusion and controversy surrounding this question. There are two internationally-recognised sets of 'limits' on air quality, set by two different organisations. At the moment, UK Local Authorities are only legally required to meet the first, less stringent, one of these limits:

- **European Union (EU) limits.** These are the agreed legal limits set by EU member states on air quality. When setting these limits, EU states of course had strong regard to expert opinion on the health impact of poor air quality, but the measures set were also to some extent a compromise between EU member states. This means that the EU limits on PM_{2.5} and PM₁₀ are not as stringent as evidence on health effects suggests they should be.

- **World Health Organisation (WHO) limits.** These limits are considered to be more closely related to the actual health impact of poor air quality. Whilst the WHO limits on NO₂ are the same as EU limits, they are lower than EU limits for PM₁₀ and PM_{2.5}.

Table 1 below compares WHO and EU limits, and shows that the WHO limits for PM are significantly more stringent. At present, UK regulations only require Councils to meet the less stringent EU limits on air quality,¹⁰ and accordingly most councils' air quality strategies (including Brent's) are built around meeting these limits.

Table 1. How WHO limits on air quality differ from EU legal limits. Adapted from Camden Council's Clean Air Action Plan 2019-2022¹¹

POLLUTANT	UK NATIONAL AIR QUALITY OBJECTIVES	WHO AIR QUALITY GUIDELINES
NO₂	40µg/m ³ (from 1 January 2006)	40µg/m ³
PM₁₀	40µg/m ³ (from 1 January 2005)	20µg/m ³
PM_{2.5}	25µg/m ³ (from 1 January 2021)	10µg/m ³

There is a growing debate over whether or not the UK could go further and set targets to meet the WHO limits also, and the Government has previously indicated that they may introduce legislation along these lines.¹² Despite this, across the UK as a whole, projections suggest we are unlikely to meet even the less stringent EU emissions targets for PM_{2.5} by the target dates of 2020 and 2030, and we are also set to miss a range of other environmental goals.¹³ We will revisit this theme in Chapter 3.

Set against this, experts in the science have stressed that there is no 'safe' limit of these compounds, and that whilst WHO limits are a positive step forward there is a need for governments to go even further in future. It is also worth putting the steps local Councils need to take in the context of the wider national and international measures against air quality which need to be implemented: we have been advised that even if all of London reduced the PM created by London-based sources below WHO limits, all else held equal, the air quality in London could still exceed WHO limits due to the air pollution created outside of London. This should not, however, act as an excuse for Councils not taking local action: we should lead by example, and take all the steps necessary to ensure that, if all Councils followed suit, we would be brought within WHO limits.¹⁴

National and regional context

Air quality in the UK

Globally, air pollution is now the biggest environmental risk to early death, and the most recent Global Burden of Disease study estimates that both indoor and outdoor air pollution was the

cause of 5.5 million deaths globally in 2013. In line with this, it is the top environmental risk to ill health in the UK, and is the fourth greatest threat to public health after cancer, heart disease and obesity.¹⁵

Across the UK as a whole:

- Long-term exposure to man-made air pollution is thought to have an effect equivalent to **28,000 to 36,000 deaths a year**¹⁶
- PM2.5 alone is estimated to cause an average loss of life expectancy of 7 months for the UK population as a whole¹⁷
- The health costs arising from air pollution are thought to add up to more than **£20 billion** per year,¹⁸ but it is thought that even this figure is conservative and the true cost could be higher
- **More than 8%** of all deaths in the UK are linked to air pollution. This is much lower than in many developing countries, where as many as a quarter of deaths are attributable to air pollution, but it still puts us 55th in the world in terms of the proportion of deaths caused by air pollution –higher than a range of other countries including the United States, Iceland, Sweden, Canada and Norway¹⁹
- **Almost all** cities and parts of the UK are above legal limits on at least some air pollutants²⁰

Figure 1. Sources of air pollution in the UK. Figures derived from Public Health England.²¹

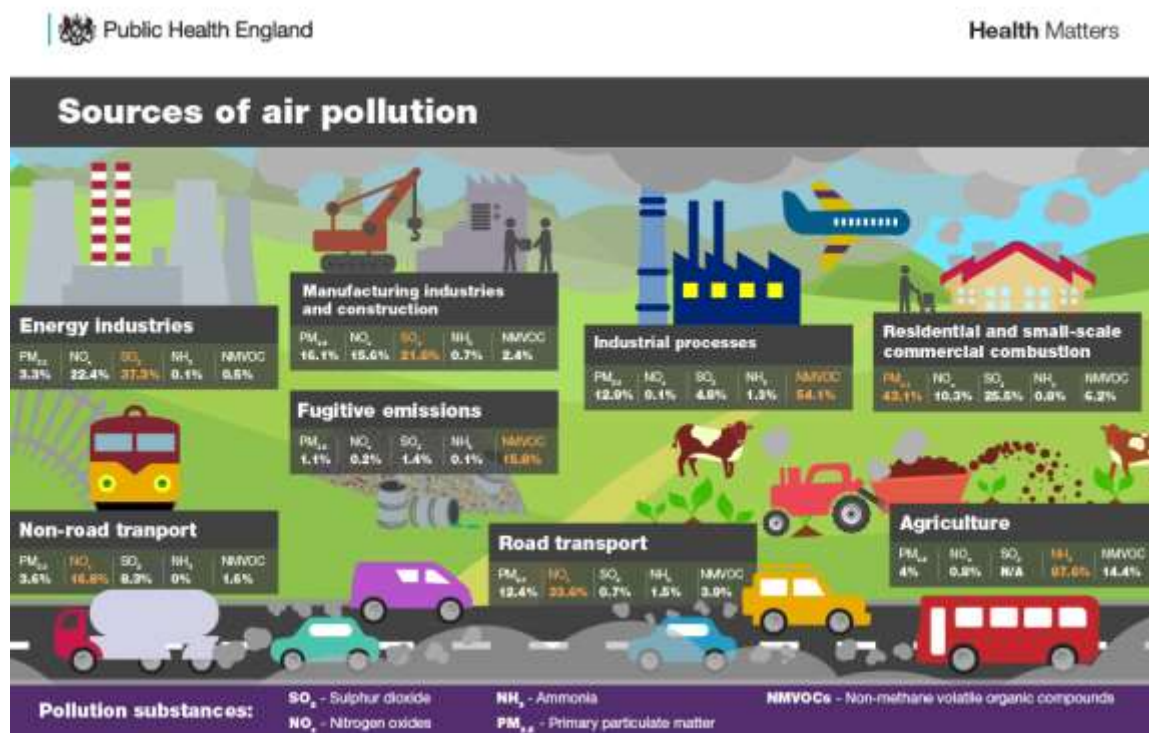


Figure 1 above provides a breakdown of all the sources of air pollution in the UK. It shows that the single largest source of PM 2.5 (43.1%) is residential and small-scale commercial combustion – such as heating in households, wood burning and cooking processes – whilst the largest source of NOx (33.6%) is road transport. Agriculture, manufacturing industries, industrial processes, non-



road transport and energy industries also make a significant contribution to air pollution, but these largely fall outside the scope of this inquiry.

Air quality in London

London now meets legal limits for most pollutants, and the ‘great smogs’ which London saw in previous decades – and which brought about the passage of our past Clean Air Act over six decades ago – are now thankfully a thing of the past. But as new technology and modes of transport have been adopted, new challenges have now emerged in the capital and are yet to be addressed. London fails to meet the legal limits for NO₂, and there are also concerns about the health impact caused by PM.

In our capital:

- It is estimated that in 2010 alone, **9,000 Londoners** died prematurely due to long-term exposure to air pollution²²
- **Around half** of London’s air pollution is caused by road transport²³
- **Two million Londoners** live in areas that continually exceed safe air pollution limits, including 400,000 children²⁴
- King’s College London research into the immediate, short-term impact of air pollution has found that of 9 UK cities researched, London air quality is responsible for by far the most hospitalisations due to cardiac arrest, strokes and asthma related to poor air quality²⁵
- There is of course a great deal of variation in exposure to air pollution across the capital, with central London, Heathrow and the area around the north and south circular much more exposed to NO_x than the suburbs and outskirts (see Figure 2 overleaf)

Whilst the challenge facing our capital is stark, they are in no way unique, and it is worth putting this into the context of the problems facing other global cities. London is Europe’s largest city, and this brings with it a range of considerable air quality challenges. But it has less air pollution than many other European cities. Indeed, if we rank the 3,226 world cities with a population over 100,000 according to their level of air pollution, London comes towards the bottom end of the scale, at 2,516.²⁶

The Greater London Authority (GLA) Environment Strategy has set ambitious targets to address this. London is aiming to have the best air quality of any major world city by 2050, and aims to minimise inequalities in air pollution. It has a target to achieve compliance with EU legal limits on air quality “as soon as possible”, and to meet the more stringent WHO limits by 2030.²⁷ The policies the GLA have adopted to address these issues will be explored in a later section of this report.

Local context

Sources of poor air quality in Brent

In order to understand more about air pollution in Brent specifically, this scrutiny inquiry commissioned a number of reports from the Council. We also carried out a literature review of existing Brent commitments on, and reports into, air pollution. The figures overleaf give information on the causes of air pollution in Brent by source for NO_x, PM_{2.5}, PM₁₀ and CO₂.²⁸ Amongst other things, they show that:

- **Road transport makes the single biggest contribution to NOx and PM emissions in Brent**, and is responsible for 49% of NOx emissions, almost half of PM2.5 emissions and over 40% of PM10 emissions
- **Of all road transport sources, diesel cars make the single biggest contribution to NOx and PM2.5**, but not PM10. For NOx, TfL buses make the second-biggest contribution, whilst for PM2.5 it is petrol cars
- **However other, often-overlooked sources also make a considerable contribution to air pollution.** When taken together, domestic heat and power generation, construction and industrial processes all rival road transport as a cause of air pollution. Any strategy to combat local air pollution needs to be mindful of this
- **The relative contribution of residents and non-residents to air pollution in Brent is largely not known.** This will have a significant bearing on the policies required
- **CO2 emissions in Brent are caused by a different range of factors**, with industrial and commercial processes the single largest cause, followed by domestic heat and power

Figure 2. Annual average nitrogen dioxide concentrations in London in 2016. Source: London Atmospheric Emissions Inventory.²⁹

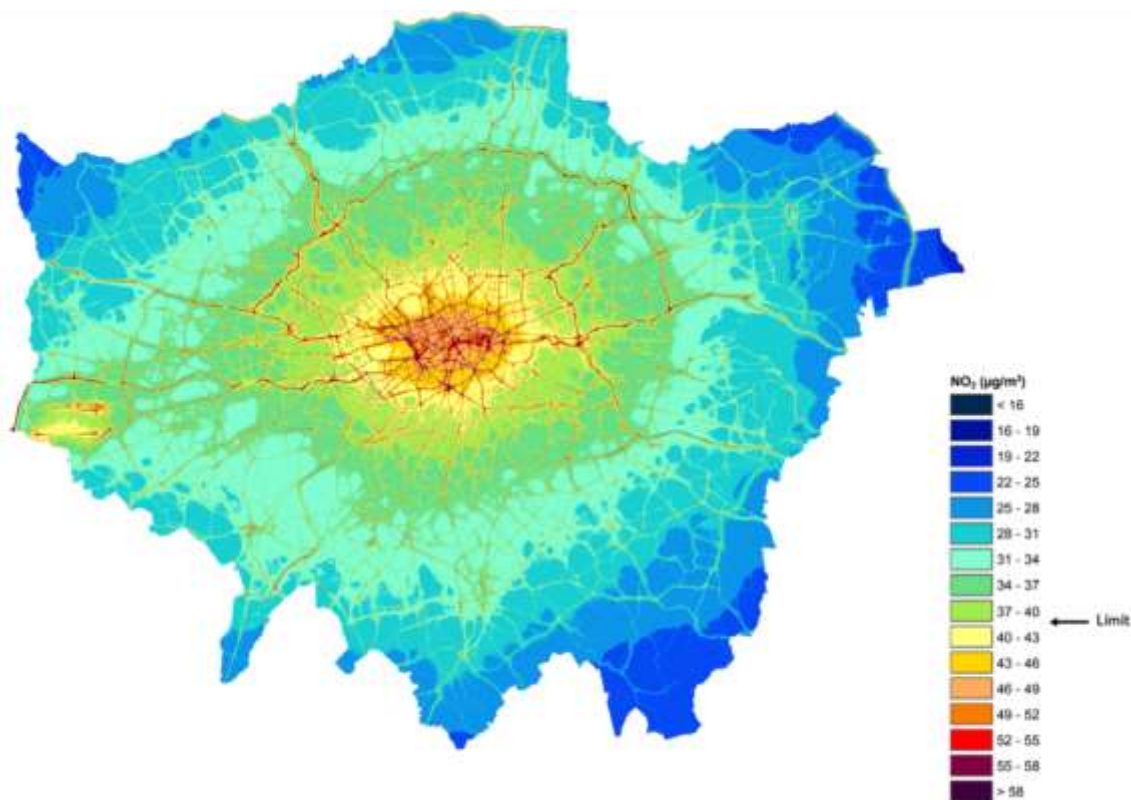


Figure 3. NOx emissions in Brent by source. Source: London Atmospheric Emissions Inventory 2016³⁰

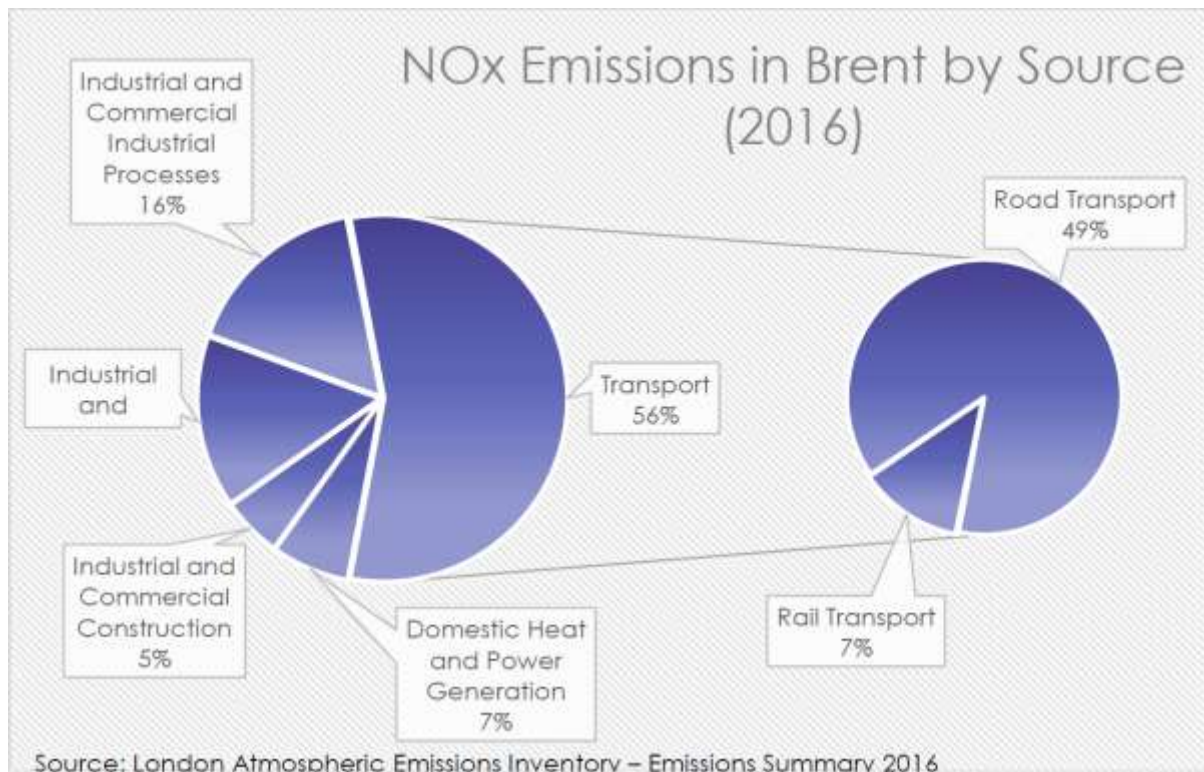


Figure 4. NOx emissions in Brent by road transport. Source: London Atmospheric Emissions Inventory 2016³¹

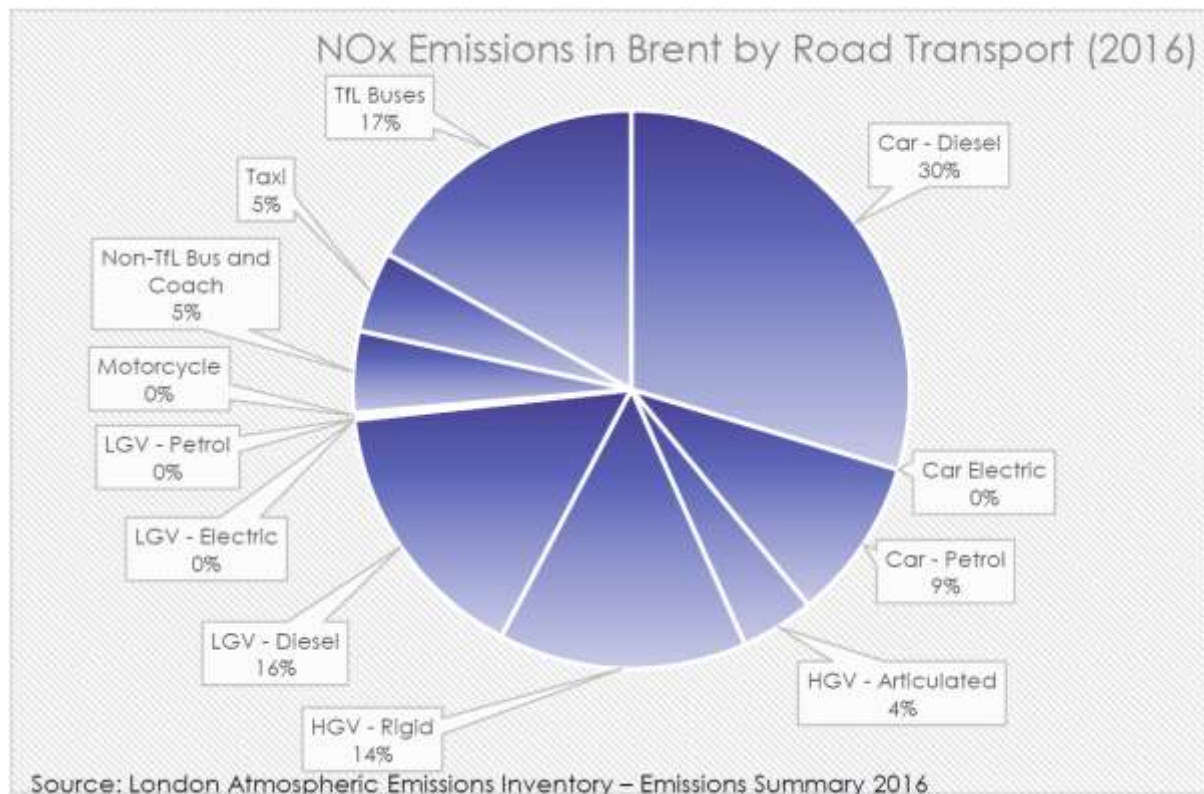


Figure 5. PM2.5 emissions in Brent by source. Source: London Atmospheric Emissions Inventory 2016³²

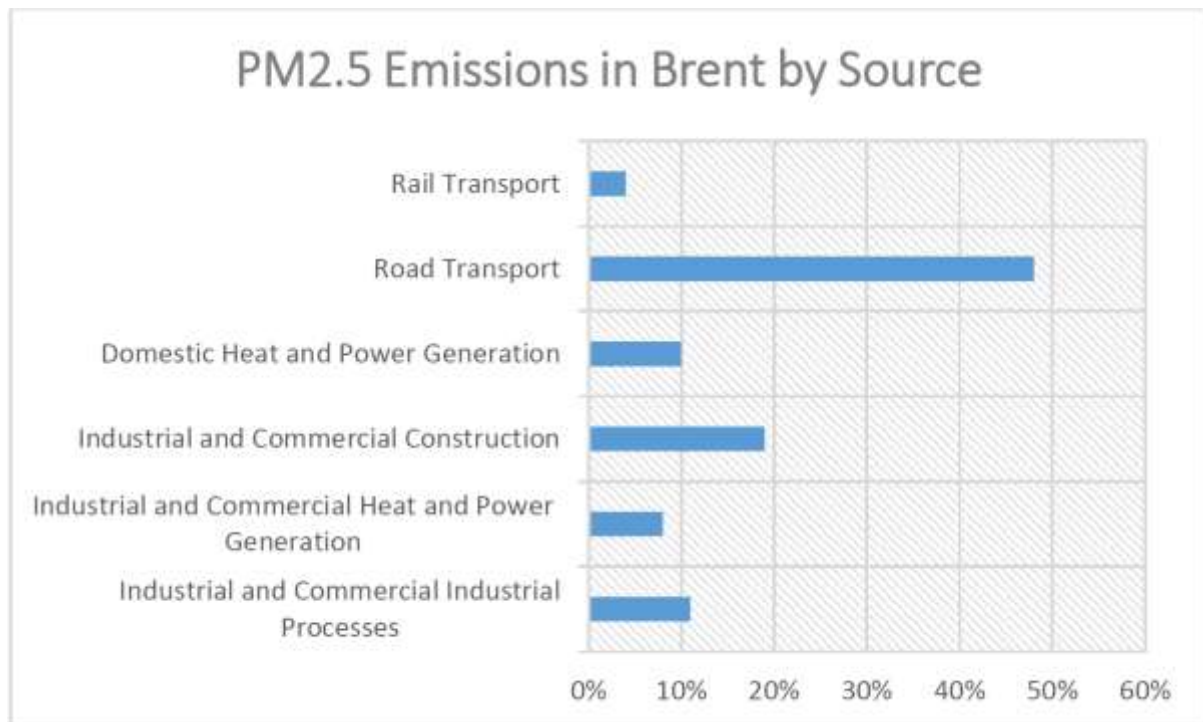


Figure 6. PM2.5 emissions in Brent by road transport. Source: London Atmospheric Emissions Inventory 2016³³

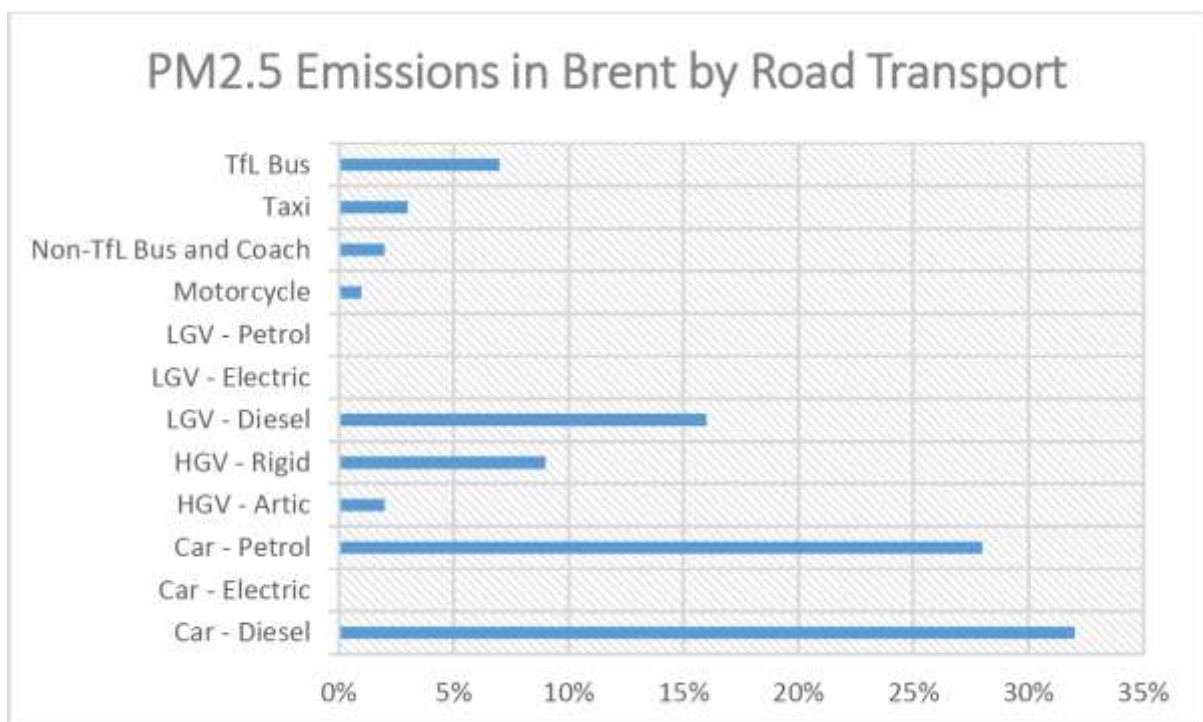


Figure 7. PM10 emissions in Brent by source. Source: London Atmospheric Emissions Inventory 2016³⁴

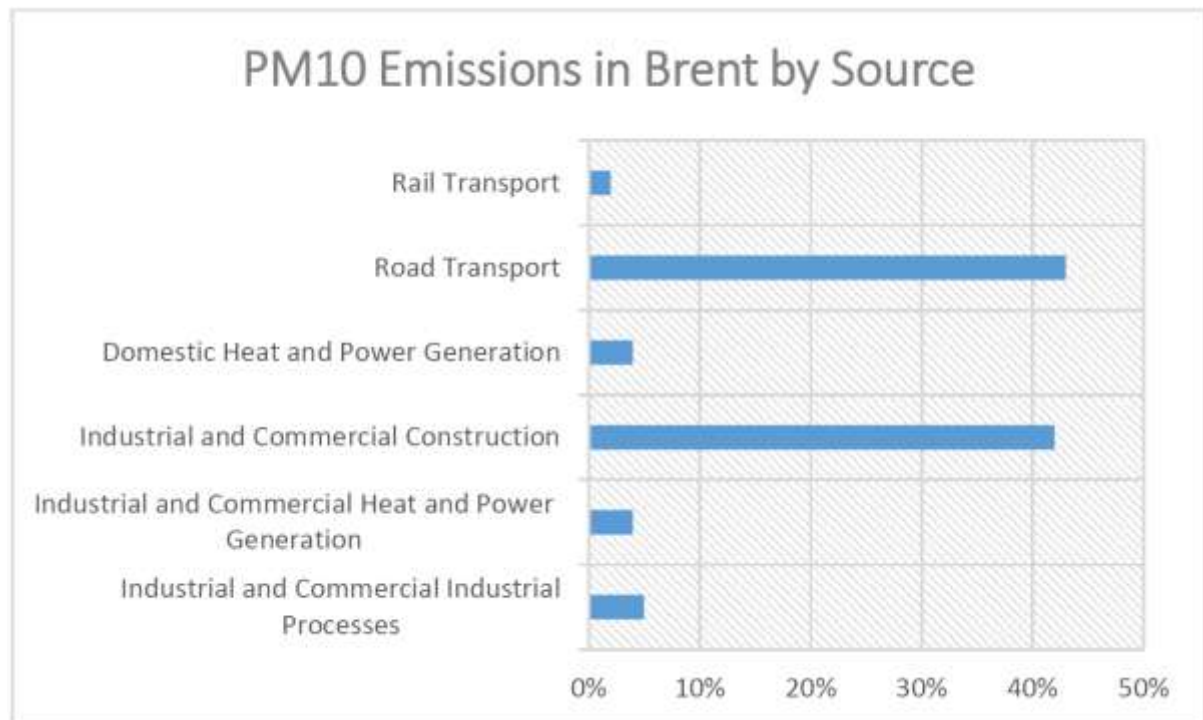


Figure 8. PM10 emissions in Brent by source. Source: London Atmospheric Emissions Inventory 2016³⁵

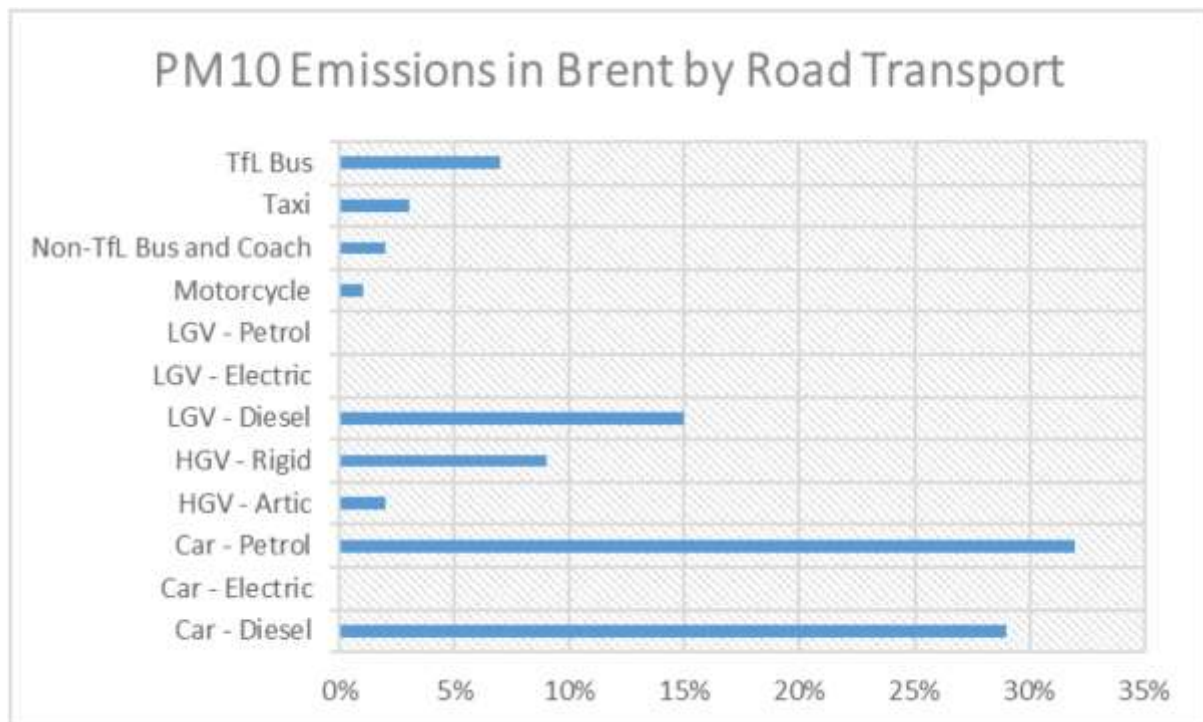
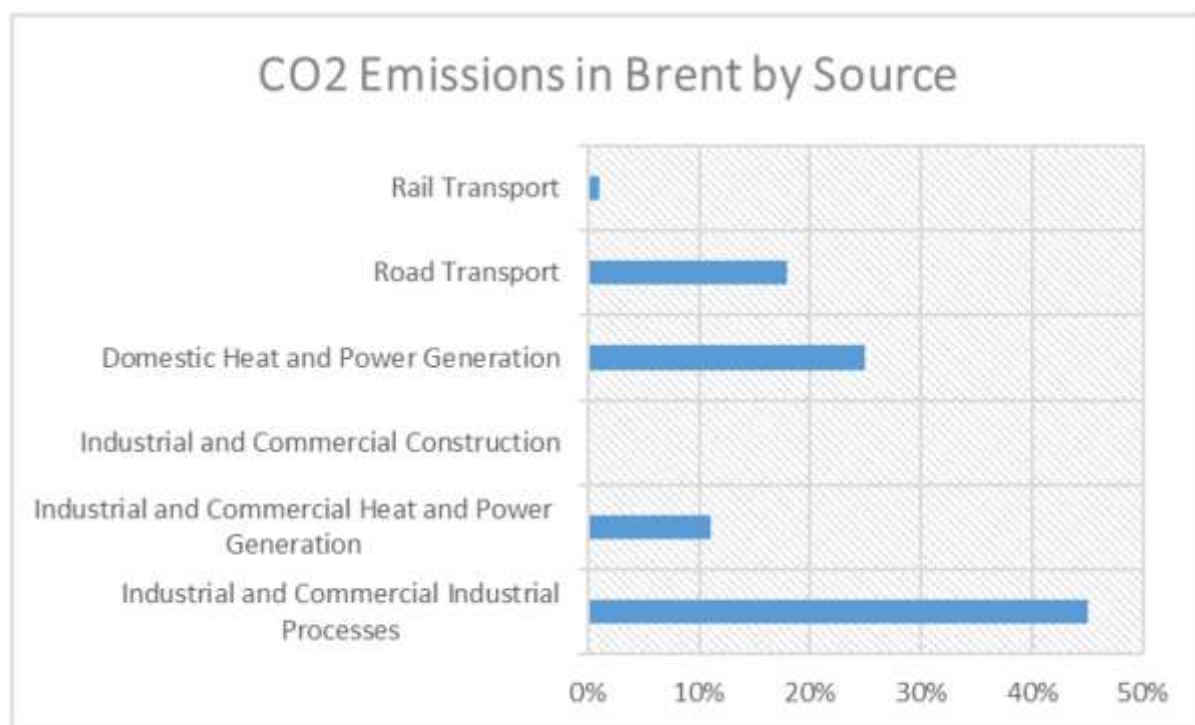


Figure 9. CO2 emissions in Brent by source. Source: London Atmospheric Emissions Inventory 2016³⁶



The impact of poor air quality in Brent

Across the borough, on average, Brent is compliant with EU legal limits on PM2.5 and PM10 in most areas this is measured, but as with London as a whole we are not compliant with legal limits on NO2. Parts of Brent, however, are not compliant with the more stringent WHO limits on air PM10. There is a general trend towards a fall in air pollution, but significant challenges remain and there are concerns that many pockets of the borough are not compliant with EU legal limits, let alone the more stringent limits of the World Health Organisation.

There is not always localised data available on the impact of air quality in Brent, but the scrutiny inquiry was made aware of the following stark statistics:

- Recent Friends of the Earth research suggested four of the 10 most-polluted roads in London are in Brent
- A 2010 study attributed **133 deaths** in Brent in 2008 to PM2.5 exposure³⁷
- A 2012 study attributed **7.2%** of mortality in Brent to long-term exposure to PM2.5, which puts us in the middle of the league table of London boroughs³⁸
- Mortality caused by PM2.5 in Brent is above some comparable London boroughs like Barnet (6.8%) and Harrow (6.4%) but below inner London boroughs like Camden (7.7%), the City of London (9%) or Islington (7.9%)³⁹

Neighbourhood-level analysis: how does air quality vary within Brent?

As with any Local Authority, there are clearly significant variations in exposure to air pollution across Brent. Across the UK as a whole, more deprived neighbourhoods tend to be exposed to greater concentrations of air pollution and suffer more of the health effects of poor air pollution.

Although the scrutiny inquiry has not been made aware of any similar borough-level analysis within Brent, it is likely that the same picture is apparent here.⁴⁰

In addition, in line with many other Councils – especially those lying between the North Circular, and straddling Inner and Outer London – Brent’s infrastructure and built environment clearly has some significant challenges which cause a great deal of inequality in exposure to air pollution across the borough. Brent is separated to the north and south by the North Circular, and to the east and west in two places by a tube network. These factors can make it hard to plan and construct routes for pedestrians and cyclists, and can significantly contribute to high levels of air pollution along the north circular.

There are also large differences in accessibility to public transport across the borough, which drive significant variations in car usage between different areas of Brent.⁴¹ Many of the factors which drive this variation are not under the direct control of the Council, and other stakeholders – most especially Transport for London, local businesses and non-residents who travel through Brent – need to be engaged to address these challenges. These challenges will be discussed in further detail in Chapters 3 and 4, where we look at differences in road car ownership and public transport accessibility in the borough.

In order to understand more about different levels of air pollution in the borough, the scrutiny inquiry requested some localised information from Brent Council, and carried out a review of existing evidence. They provided analysis showing that the following 9 ‘air pollution hotspots’ in the borough, based on modelling data from 2016. These are mapped in Figure 12 overleaf and consist of the following areas:

- Wembley High Road / Wembley Central
- Neasden / Blackbird Hill
- Stonebridge
- Harlesden Town Centre
- Willesden High Road
- Chamberlayne Road
- Cricklewood Broadway
- Lower Kilburn High Road
- Burnt Oak Broadway

In addition, Brent Council’s 2017-2022 Air Quality Action Plan⁴² also contains information on localised air pollution in the borough. It designates four parts of Brent as Air Quality Focus Areas (AQFAs), in need of specific policies to address air pollution: Wembley and Tokyngton; Neasden town; Church End; and the Kilburn Regeneration Area. Many of the above hotspots are contained within these AQFAs. The scrutiny inquiry is also mindful of the considerable air pollution issues around St Raphael’s estate in Stonebridge Ward, which has been the subject of an equality analysis to be presented to Cabinet on 9 December.⁴³

Finally, in 2016, the Council commissioned a consultancy to carry out an analysis of local levels of air pollution across Brent.⁴⁴ Amongst other things, this report used a model to estimate average concentrations of NO₂ and PM₁₀ across the borough (they did not analyse levels of PM_{2.5}). The results of their analysis are contained in Figures 11 and 12 below, and give an impression of the variation of air quality across Brent. As a result of this analysis, almost all of Brent has been legally

designated an Air Quality Management Area (AQMA) by the Council, with only parts of Kenton, Sudbury and Welsh Harp outside of the AQMA.⁴⁵

Figure 10. Modelling estimates of average PM₁₀ concentrations in Brent in 2015. Source: Ricardo Energy & Environment analysis for Brent Council.⁴⁶

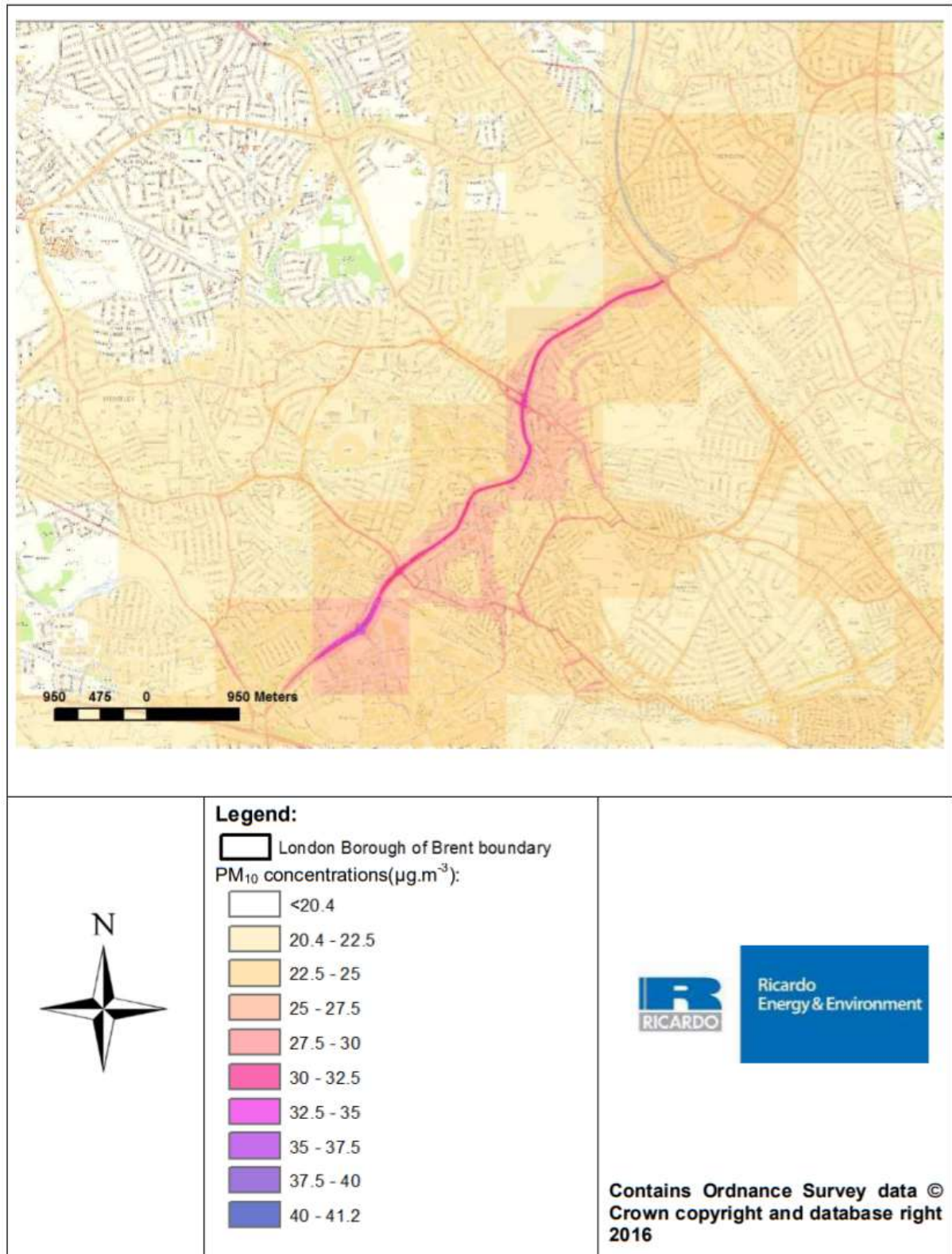


Figure 11. Modelling estimates of average NO₂ concentrations in Brent in 2015. Source: Ricardo Energy & Environment analysis for Brent Council.⁴⁷

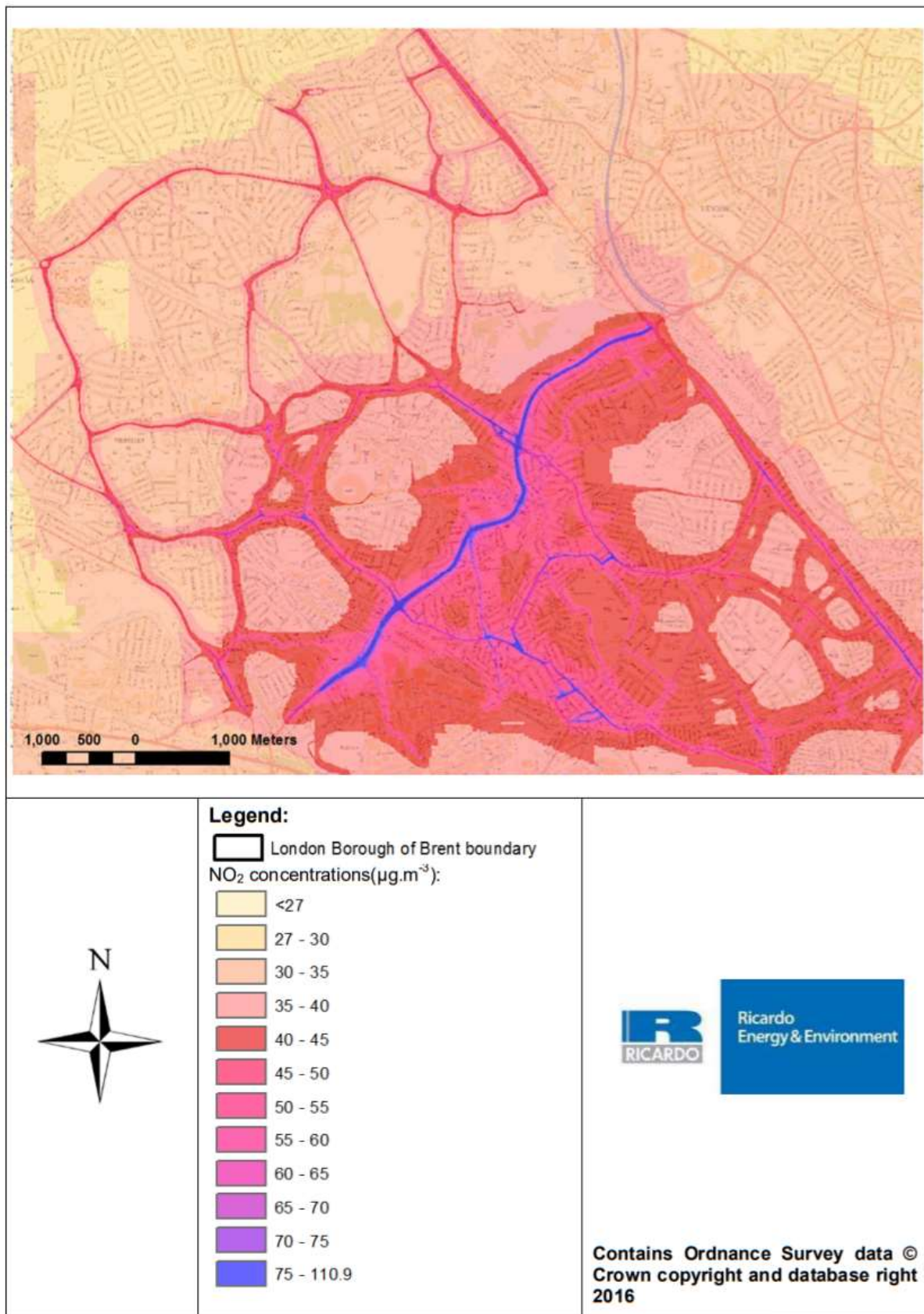
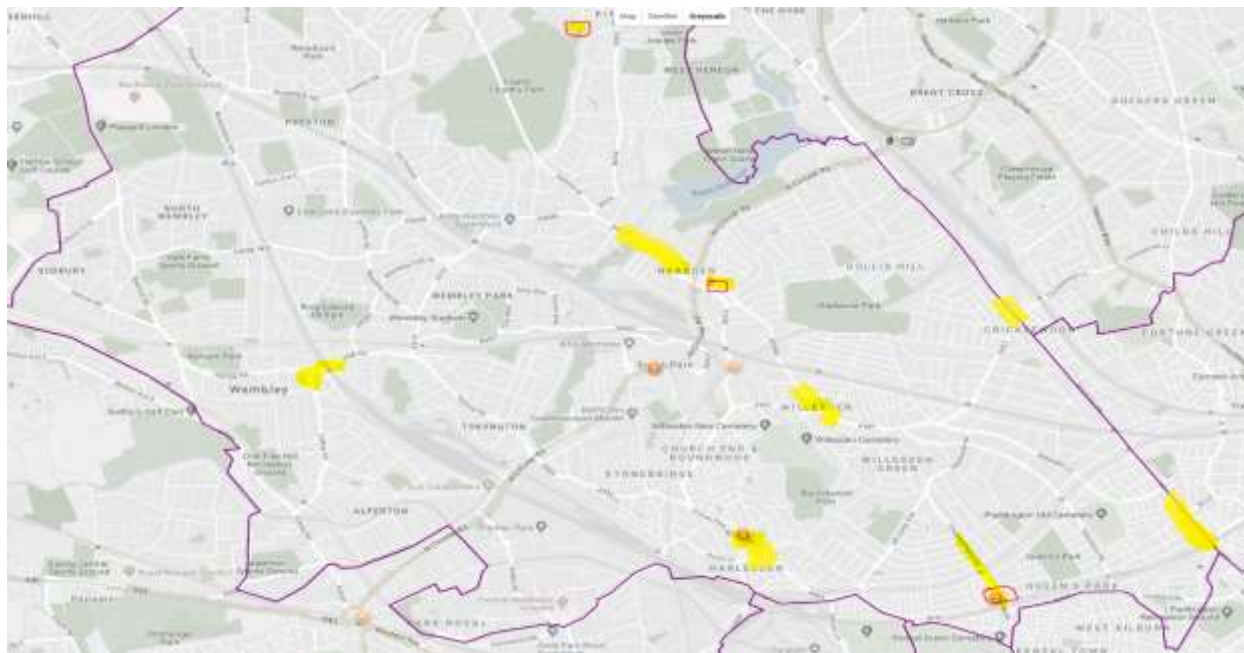


Figure 12. Identified ‘air pollution hotspots’ in Brent. Source: London Atmospheric Emissions Inventory 2016 model prediction of air quality up to 2020. Data provided by Brent Council.⁴⁸





Chapter 3

Objectives of Brent's Air Quality Action Plan

Introduction

This chapter reviews the over-arching objectives of Brent's 2018-2022 Air Quality Action Plan, such as the air quality standards we are to meet and how we will measure progress across the borough.⁴⁹ We will scrutinise how Brent proposes to meet these objectives in succeeding chapters of this report, but our focus in this chapter will be on the overall, high-level goals set in the action plan.

Existing commitments by Council and GLA

Brent's existing air quality action plan is focussed on one over-arching objective, namely achieving and exceeding existing EU legal limits on air quality. Air quality across the borough as a whole is measured using annual averages from Brent's network of 27 diffusion tubes which measure NO₂ and five 24-hour monitoring stations, which are scattered at key strategic points across Brent.⁵⁰

The data from these monitoring stations, both in Brent and across London, is also used to inform a model which estimates air quality across every neighbourhood in London, even in areas where there is no monitoring station. This model is developed by the London Air Quality Network of King's College London, and is used to produce maps of air quality across London, the latest of which is from 2016.⁵¹

The scrutiny inquiry understands that the objective to meet EU limits on air quality across the borough as a whole is the only *outcomes*-focussed objective of Brent's air quality action plan. Beyond this, the Council's action plan has 25 objectives, all of which are *output-focussed*. We understand this objective will be met if EU limits on air quality are met across the borough as a whole, using the average data across the air quality monitoring stations, even if modelling suggests that certain neighbourhoods in the borough are above legal limits on air quality.

At the request of this scrutiny inquiry, the Council has provided an update on its progress in meeting these 25 objectives. We understand the Council will be publishing this progress report at a future date.

Scrutiny of commitments and scope for further action

In general, the scrutiny inquiry welcomes the general *outputs*-focussed nature of the 2017-2022 Air Quality Action Plan, and agrees that any strategy to address air quality should focus on setting practical, tangible objectives on the outcomes it expects to deliver. Clearly any air quality action plan should focus predominantly output-focussed objectives to improve air quality locally, with only a small and focussed number of over-arching objectives.

However, in our engagement with other Councils on air quality during the course of this inquiry, we were struck that other local authorities' air quality action plans, most particularly Camden's, set some additional overarching objectives which set stronger objectives and have been clearer on the need for the Council to lobby for change where it is unable to foster change itself. These have helped foster greater public confidence in the strength of their intentions.

In addition, in order to understand even more about what Brent's over-arching air quality objectives should be, the scrutiny inquiry also held an evidence session with the Trade Union Clean Air Network (TUCAN) – a coalition of trade unions, large and small, dedicated to raising awareness about air quality –,⁵² and sent out an appeal to information to a range of organisations dedicated to campaigning on the climate emergency, including Brent Friends of the Earth and Extinction Rebellion Brent.

Based on this engagement, the scrutiny inquiry feels that:

- **There is scope for Brent Council's strategy to commit to meeting more stringent World Health Organisation limits on air quality, and not merely meeting EU limits.** As noted in Chapter 2, whilst WHO and EU limits are the same for NO₂, they differ markedly for PM₁₀ and PM_{2.5} (see Table 1. In January 2018, Camden became the first Council to officially commit to meeting WHO limits.⁵³ This is in line with the GLA, which has also set an objective for London to meet WHO limits on air quality.⁵⁴ Whilst committing to WHO limits, as noted in Chapter 1, the strategy must also explicitly recognise that there is no safe limit of air pollution, and commit to regularly engaging with experts to stay updated on latest developments in the evidence.
- **The Council should do more to set additional targets to address inequality in air quality between neighbourhoods.** Camden's air quality strategy has explicitly recognised that it is not sufficient merely to meet legal limits for average air quality, across the borough as a whole. The Council has explicitly stated that unless they meet EU legal limits in the worst-affected neighbourhood in their borough, the objectives of their strategy will not be met.⁵⁵
- **Where the Council cannot implement the desired changes itself, it should set out a range of ways in which it will lobby the Government to achieve change,** either by introducing legislation, by better-funding Councils or by calling for greater investment at a national level. For example, Camden's strategy includes objectives to lobby national government on a car scrappage scheme, to phase out diesel trains by 2040 and to lobby large delivery companies such as Amazon to reduce their air quality impact.
- **Brent's air quality strategy must link with, and complement, the wider climate change and climate emergency agenda.** Without linking-in with this agenda, measures to combat air quality could have the unintended effect of exacerbating the climate crisis globally. For example, if there is a resource-intensive, highly-polluting and wasteful process of procuring electric cars, we may improve air quality on our own streets only to cause pollution elsewhere in the world and exacerbate global heating.

- **Brent's strategy should recognise that poor air quality is an occupational health hazard as well as a public health hazard.** For many air pollutants, existing air quality standards in the workplace, set by the Health and Safety Executive and in national legislation, are in fact weaker than WHO standards, and TUCAN feel that national air quality standards in the workplace need to be aligned to WHO standards.⁵⁶ It is also clear that many employers, including local Councils, are not meeting their legal obligations in assessing their employees' and contractors' exposure to carcinogens in the air. Brent's air quality strategy should be clear on the need for national government to take action in this area, address air quality as an occupational as well as a public health risk.

Recommendations

In light of the above, this scrutiny inquiry **RECOMMENDS:**

RECOMMENDATION 1:

THAT THE COUNCIL UPDATE THE AIR QUALITY STRATEGY, AND SET OUT AN ASPIRATION TO MEET WORLD HEALTH ORGANISATION LIMITS ON AIR POLLUTION, COMMIT TO ADDRESSING INEQUALITY IN AIR QUALITY AND COMPLEMENT THE WIDER CLIMATE EMERGENCY AGENDA. WE SHOULD ALSO LOBBY NATIONAL GOVERNMENT WHERE WE ARE UNABLE TO EFFECT CHANGE OURSELVES.

We recommend that the objectives Brent Council sets to improve air quality in the borough be updated to:

- **Commit the Council to meeting and exceeding WHO limits on air pollution, whilst also acknowledging that there is no 'safe' limit of air pollution.** This would bring the Council in line with the GLA's Environmental Strategy and the air quality strategies in other Councils. We must also lobby the Government to set World Health Organisation (WHO) limits as the legal limit for air pollution in national legislation, and provide Councils with the necessary funding to meet them.
- **Set targets to address the inequality in air pollution between areas,** such that our air quality strategy objectives will not be met until the worst-affected neighbourhood in our borough meet limits on air quality. It should build on its existing approach to air quality hotspots and set a target to bring air quality in all of these hotspots within WHO limits
- **Acknowledge that our air quality objectives will not be met without a modal shift in the way we go out and about in the borough,** with a greater number and proportion of future journeys involving cycling, walking and public transport. This requires measures to support the greater use of active travel and public transport usage, and not simply encourage existing drivers to switch to electric and hybrid cars. It should explicitly raise awareness of and support initiatives such as the Ultra-Low Emission Zone, which evidence shows will be the most effective in improving air quality
- **Complement and reinforce the wider global heating and climate emergency agenda.** The air quality strategy must ensure that measures Brent Council takes to address air quality also contribute to meeting our wider climate objectives, and must not have the unintended effect of exacerbating the climate emergency. All policies in our action plan should be tested against this objective.

- **Where we are unable to make the changes ourselves, lobby national Government and the Greater London Authority for the changes and funding we need.** This will help foster public confidence in our air quality strategy, and make it clear where we are prevented from implementing certain policies by factors outside of our control.

Amongst other things, we should lobby for:

- The Government to enshrine a right to clean air in national legislation.
- Better workplace air quality standards, so that they reflect the actual health impact of poor air quality on the workforce, and work with trade unions to consistently promote air quality as an occupational health issue as well as a public health issue.
- Stronger legislation to take action against engine idling, such that in certain instances, most especially around schools, fines for idling can be issued more easily than at present without the need to first ask drivers to turn off their engines.
- Make it easier for councils to take enforcement action against wood and waste burning, where this is having a proven negative impact on air quality.
- Companies like Amazon, JustEat and other delivery firms to take a more responsible approach to their deliveries, which minimises air quality impact – for example by pooling together deliveries, using cyclists as deliverers and delivering to community 'hubs' rather than individual addresses where possible.

The Council should also regularly engage with experts in air quality, including the London Air Quality Network of King's College London (of which we are already a member) in order to maintain an up-to-date picture of the health impact of air quality and the factors which cause poor air quality. It should pay particular regard to the evidence of the air quality impact of electric vehicles, and the growing understanding of the specific chemicals within particulate matter which cause most damage to human health.

In order to signify the strength of the Council's intent in this area and further codify some of these objectives, there should be a Full Council motion on air quality, updating and enhancing the Council's previous commitments in its climate emergency motion.



Chapter 4

Personal car usage, freight and procurement

Brent's current situation

As noted earlier, road transport is the single largest cause of NO₂, PM_{2.5} and PM₁₀ emissions in Brent, in London and across the UK as a whole, and is responsible for roughly half of the gases and particles in our air.

Within this, personal transport usage is the single biggest contributor to air pollution, with wider procurement processes by businesses also making a significant contribution. This chapter will consider both issues in turn.

Personal car usage

A 2010/11 study by TfL found were 2.6 million cars registered in London, or 0.3 cars per adult in London, with 54% of London households having at least one car. Their statistical analysis found that, perhaps unsurprisingly, car ownership rates are seen amongst those who:⁵⁷

- Live in outer London
- Live in an area with poor access to public transport
- Are aged 55-59: personal car ownership increases up to a peak at age 55-59, but declines thereafter
- Have higher household incomes: ownership increases up to £75,000 but flattens off afterwards
- Have children, with people in households with at least one child nearly a third more likely to own a car than those without
- Are in full-time employment
- Are of Western European nationality

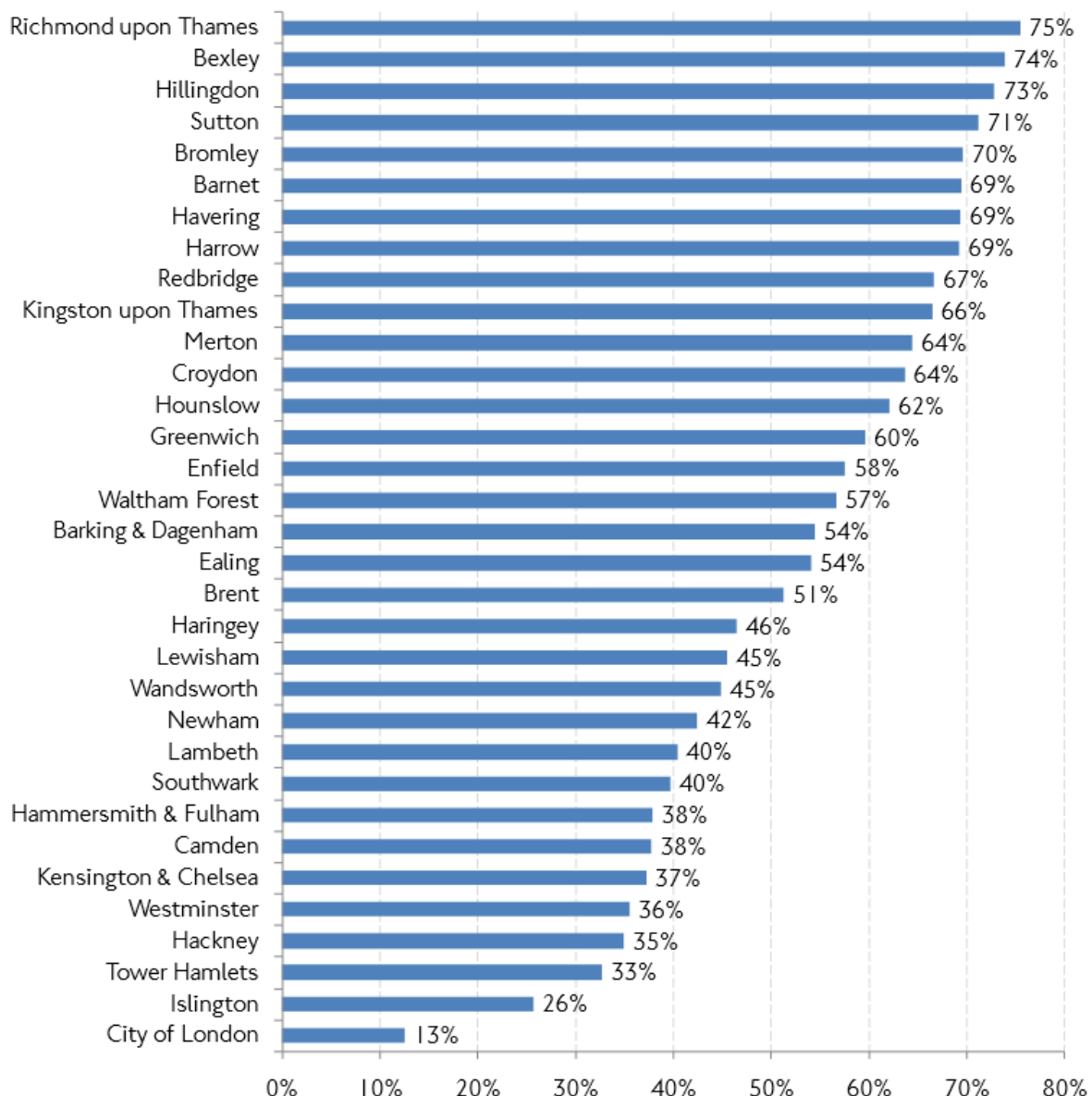
Car ownership levels vary substantially across London boroughs, with outer London boroughs tending to have significantly higher car ownership rates than those in inner London boroughs. However, as illustrated by Figure 13 below, contrary to what might be assumed car ownership levels in Brent actually put us in the bottom half of the London league table, with lower car ownership rates than Councils like Harrow, Barnet and Ealing. Of the outer London boroughs, only Haringey and Newham have fewer households with access to a car.

As part of its work, the scrutiny inquiry asked the Council to provide estimates of the number of diesel cars registered in Controlled Parking Zones in the borough. Although they do not collect data on the number of registered diesel vehicles specifically, as there are 33,000 permit holders in the borough, their assumption is that in line with national data on the size of the diesel car market approximately 10,000 of these are diesel. Their data also shows that as a result of changes

to the emissions-based banding of resident parking permits in April 2017, there was a 16% reduction in the number of 'high' emission permits sold between 2017/18 and 2018/19, from 3,144 down to 2,629.⁵⁸

Figures from the three previous censuses, collated in Brent's 2015 Parking Strategy, showed that in 2011, 110,286 households in Brent owned a car (see Table 2 overleaf). Of all Brent households, 43% do not own a car, 39.5% own one car, 13.5% own two cars and 4% own three or more cars. As a percentage of Brent's population, car ownership was down in 2011 from what it was in 2001 or 1991, but – very crucially – because of increases in Brent's population, the overall number of

Figure 13. Percentage of households in London boroughs with access to a car. Source: Transport for London Roads Task Force review.⁵⁹



households who own a car is higher than it was in 2001. As Brent's population increases, the forecast demand for parking and the pressures on roads and infrastructure may continue to increase, even if car ownership levels continue to decline.⁶⁰ Even if all these drivers use vehicles

with zero emissions from the exhaust, the PM2.5 and PM10 created by this increased traffic will have implications for air quality in the borough. This underlines the need for the Council to encourage a modal shift in the way we go out and about in the borough: we all need to think carefully about the journeys we make, and work to take more journeys by using public transport, walking and cycling.

In addition, data from the 2011 London Travel Demand Survey indicates that between 2005/06 and 2009/10, 44% of the trips made by Brent residents were made by car or motorcycle. This is a higher percentage than any inner London borough and above the Greater London average (38%), but below the outer London average (50%) and the sixth lowest of any outer London borough.

Table 2. Number of cars and vans per household in Brent, 1991-2018. Adapted from Brent Council's 2015 Parking Strategy.⁶¹

NO. OF CARS / VANS PER HOUSEHOLD	1991		2001		2011	
	No. of households	%	No. of households	%	No. of households	%
0 (CAR-FREE)	40,756	43.4%	37,287	37.3%	47,417	43%
1	38,153	40.6%	42,606	42.6%	43,598	39.5%
2	12,705	13.5%	16,207	16.2%	14,884	13.5%
3+	2,350	2.5%	3,891	3.9%	4,385	4%
TOTAL HOUSEHOLDS	93,964	100%	99,991	100%	110,286	100%

This is lower than boroughs like Barnet (49%) and Harrow (52%), but higher than Waltham Forest (41%) or Barking and Dagenham (40%).⁶² More recent Department for Transport data shows the number of licensed cars, heavy goods vehicles and light goods vehicles in Brent has increased from 98,120 in 2011 to 102,236 in 2018 – this only serves to reinforce the points made in the 2015 Parking Strategy, as it shows that despite reductions in the proportion of Brent residents owning cars and vans, the overall number of cars and vans owned by Brent residents has continued to increase due to increases in Brent's population.⁶³

Taken together, the evidence outlined above shows that there is significant scope for Brent to go further in reducing the air quality impact of car journeys and shifting travel to public transport, walking and cycling (something which will be revisited in Chapter 5). However, the data also show that rates of car ownership and car travel in Brent are not as high as might often be assumed, and the proportion of Brent residents who use cars has declined in recent years (even if the overall number of households owning cars has risen).

Set against this, however, there are also questions over the contribution which non-residents travelling through Brent make to air pollution in the borough. The scrutiny inquiry asked both the Council and Transport for London to shed light on this, but we were advised that it is not known how much air pollution in Brent caused by car usage is attributable to non-residents. However, because of the presence of the North Circular and the frequency of Wembley Event Days, it is likely that a considerable amount of air pollution in the borough is due to non-resident car journeys. This presents all Local Authorities with a considerable public policy challenge, because whilst it is relatively easy to encourage residents to shift to less polluting vehicles (through for

example the diesel surcharge in Controlled Parking Zones), the policy options Councils have available to change *non-resident* behaviour are more limited.

For event days, however, the Football Association provided us with a breakdown of the percentage of journeys made by car for each type of event in the borough.⁶⁴ Table 3 below provides a breakdown for all six event types which took place at the stadium in 2017/18. The average across all event types was that 78.5% of journeys took place using mainline rail, London Underground and the London Overground, with 6.6% taking place by car. The lowest car share was 4.7% for NFL events, whilst the highest car share was 7.9% for rugby. The Football Association advised us that there can be particular difficulties in getting high public transport usage for sports matches for teams outside of London with relatively poor or expensive railway links, such as certain Championship play-offs.⁶⁵

There were 2,350 car parking spaces in Wembley in official sites around the stadium and there are plans to increase this to just short of 3,000, but the true level of event day parking is even higher than this: it is also understood by the FA that there are at least an additional 7 'pirate' parking sites in the borough which both the Council and FA are constantly trying to close down, and parking both inside and outside of the event day Controlled Parking Zone is also known to take place.

Table 3. Modal share of journeys at Wembley event days. Adapted from the Football Association's Wembley Stadium Spectator Travel Plan 2018.⁶⁶

	ENGLAND INTERNATIONAL	'OTHER' FOOTBALL MATCHES	TOTTENHAM HOTSPUR MATCHES	CONCERTS	RUGBY	NFL
CAR	7.2%	7.2%	7.0%	6.4%	7.9%	4.7%
COACH	5.1%	8.8%	2.7%	2.7%	28.9%	2.5%
MOTORCYCLE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BLUE BADGE	0.2%	0.4%	0.4%	0.2%	0.5%	0.0%
MINIBUS	0.4%	0.5%	0.2%	0.0%	0.3%	0.0%
MAINLINE RAIL AND TFL	86.9%	81.2%	80.5%	75.5%	58.0%	84.2%
OTHER	0.2%	1.9%	9.2%	15.0%	4.3%	8.6%

Freight, deliveries and procurement

In addition to this, there are also concerns about the contribution which the procurement processes and deliveries for businesses, households and other organisations operating in the borough – including the Council – make to air quality locally. Data provided to the scrutiny inquiry by the Council (see Chapter 1) highlights that heavy goods vehicles (both 'articulated and 'rigid') and light goods vehicles ('diesel') are responsible for a significant proportion of the air pollution caused by road transport in the borough, namely:⁶⁷

- **34%** of NOx emissions
- **28%** of PM2.5 emissions
- **28%** of PM10 emissions

Even these figures will be an understatement, because they don't count for the air pollution caused by cars or motorcycles involved in the procurement and deliveries business – such as JustEat and other takeaway deliveries delivered directly to people's homes. As the popularity of supermarkets and retail environments continues to decline, there are concerns that younger generations may increasingly resort to home deliveries and thus inadvertently impact on air quality. There is an urgent need for local and national government to raise awareness of the implications of this, and work to force the private sector to reduce the air quality impact of this delivery.

It is thought that the air quality impact of freight and delivery processes could be significantly reduced through a number of measures. The Council could lead by example by minimising the air quality impact of its own processes in these ways, but it also has a crucial role to play in ensuring the private sector follows suit:

- **Maximising the use of active travel, such as cycling, for deliveries** – especially for the 'final mile' when small deliveries are delivered directly to people's homes or to small businesses.
- **Integrating local procurement processes to remove duplication from businesses.** For example, rather than having several businesses in the same location source milk from several separate suppliers, these firms could integrate processes and get things delivered in a single vehicle.
- **Changing the times of deliveries to minimise traffic impact**, for example by ensuring that as few deliveries as possible take place during rush hour.
- **Encouraging people to collect orders in 'central hubs', rather than delivering directly to their homes.** Councils could play a role in identifying where these hubs could be located, and encouraging individuals to use them.
- **Where vehicles have to be used, switching to low emission vehicles** such as electric cars and vans. For example, work is currently being undertaken to explore whether Brent Council's Veolia waste collection lorries could be switched to electric in the years to come

It has not been possible to obtain exact figures on the air quality benefits which could be achieved in Brent from the above activities. However, the scrutiny inquiry is aware of successful initiatives in Westminster City Council and the Cross-River Partnership which have achieved considerable success. A 'preferred suppliers' initiative for waste collection in Bond Street, spearheaded by the Cross-River Partnership, was able to deliver:⁶⁸

- A reduction in waste collection companies from **47 to 5**
- A **75% reduction** in the use of waste vehicles
- **40%** fewer bin bags left on the street
- **25%** average savings on annual waste removal and recycling costs

The scrutiny inquiry discussed these initiatives with both the Football Association and with the Environmental Research Group of King's College London. It was highlighted that as well as delivering considerable environmental benefits, these initiatives tend to deliver significant cost savings to businesses. Local government and public/private partnerships such as the Cross-River Partnership in Central London have a crucial part to play in making businesses aware of these savings, and working with them to coordinate deliveries, reducing air quality impact whilst also delivering cost savings for businesses.



Existing commitments by Council and GLA

Brent Council's existing air quality strategy sets a number of wide-ranging objectives to address the air quality impact caused by personal car usage, freight, deliveries and procurement. In particular:

- In July 2019, the Council introduced a diesel surcharge in all Controlled Parking Zones in the borough for both resident and annual visitor parking permits, in order to encourage a shift towards lower-emission vehicle uses.⁶⁹ The scrutiny inquiry asked for figures on the success of this initiative, but given that it has only recently been initiated it is too early to assess its impact. At present, the surcharge does not apply to 'Pay and Display' parking
- A significant expansion of ultra-low emission vehicle and electric vehicle charging points, to make it easier for car users to switch to electric cars.
- Discouraging unnecessary idling by taxis and other vehicles
- Exploring the feasibility of introducing Low Emission Neighbourhoods in certain parts of the borough
- Encouraging the use of car sharing and car pooling
- Engaging with businesses on air quality, primarily through encouraging the uptake and implementation of workplace travel plans
- Developing a freight strategy to reduce the emissions caused by deliveries to local businesses and residents. This is being done mainly by encouraging businesses to re-time when they do deliveries, so they do not do them during congested hour
- Reducing emissions from the Council's existing fleet of vehicles, in order to ensure we can lead by example

The scrutiny inquiry broadly welcomes these initiatives, and particularly supports the efforts the Council has made to introduce a diesel surcharge. These have the potential to make a significant contribution to addressing issues related to air pollution. However, as important as these initiatives are, the evidence is clear that by far the most significant and beneficial policy that can be implemented to address these issues, both at a Council and a GLA level, is the introduction of clean air charging zones, which impose daily charges on vehicles travelling through cities which fail to meet certain emissions standards.

To this end, both Leeds City Council⁷⁰ and Birmingham City Council⁷¹ have recently set out plans to introduce these charging zones. The scrutiny inquiry met with the latter during the course of our investigations, who confirmed that clean air charging zones must lie at the centre of any initiative to address the air quality impact caused by personal car usage, freight and procurement. These initiatives also have the added advantage of not discriminating against resident or non-resident drivers, and thus reassuring residents in affected areas that non-residents passing through their local area are not unfairly exempted from measures to improve air quality.

Consistent with this, at a GLA level, two highly effective policies have been implemented or are now in the process of being implemented, and have already had significant positive benefits. The charges these policies have imposed are in addition to the congestion charge for those vehicles travelling in the congestion charging zone:

- **Introducing a London-wide Low Emission Zone (LEZ) charge for the most polluting heavy diesel vehicles, including vans, lorries, HGVs and specialist heavy vehicles.** This is

a 24/7 charge set at two levels, £100 and £200 a day, depending on the weight of the vehicle, and covers the whole of Greater London.⁷²

These standards are based on how much PM a vehicle emits, but the standards will be toughened from 26 October 2020 based on the impact these vehicles have on NOx and to align them to Ultra Low Emission Zone (ULEZ) standards (see below), and higher charges will be set for heavier vehicles which do not meet certain standards.⁷³

- **Introducing a more targeted Ultra-Low Emission Zone (ULEZ) charge for all vehicles, including cars, which fail to comply certain emissions standards.** These charges are set based on the NOx emissions of vehicles, and are set at £12.50 a day for cars, motorcycles and vans up to and including 3.5 tonnes, and £100 a day for heavier vehicles.⁷⁴

On 8 April 2019 the ULEZ was extended to the same area covered by the congestion charge, replacing a previous toxicity charge (T-charge) which was already in operation in London, but from 26 October 2021 it will be extended to the border of the North Circular (it will not include the North Circular itself), and will therefore cover the southern half of Brent.⁷⁵

Early evidence on the impact of the ULEZ has been highly positive, and the scrutiny inquiry had a meeting with Transport for London which was specifically dedicated to understanding the impact of the ULEZ in central London and drawing any lessons which we could apply for when the ULEZ is extended to outer London boroughs in October 2021. Early evidence shows that as a result of the extension, Central London has seen:⁷⁶

- A **29% reduction** in NOx emissions
- **13,500 fewer** polluting vehicles on roads
- **77%** of vehicles travelling through the ULEZ have been compliant with the standards

Figure 14. Predicted impact of the 2021 ULEZ extension in Brent: map of areas exceeding the legal NO2 limits before and after the ULEZ extension. Source: Clean Air for Brent adaptation of Transport for London figure.⁷⁷



- There is no evidence of any “traffic displacement” having taken place (areas just outside of the ULEZ facing greater traffic pressures as a result of the ULEZ introduction)
- Although the ULEZ was not introduced with the specific aim of reducing PM emissions, TfL expects that there has also been a reduction here due to reductions in overall car usage

Clean Air for Brent has further highlighted that as a result of the Ultra-Low Emission Zone, extension in 2021, it is predicted that in Brent:⁷⁸

- There will be a **74% reduction** in road length exceeding NOx limits within Brent (see Figure 14 below)
- **84%** fewer residents (4,700) will live in areas exceeding NOx limits
- All of Brent’s schools will be taken out of areas exceeding NOx limits
- The impact of the ULEZ will be felt even in areas outside of the ULEZ itself, with many areas north of the North Circular brought within legal limits for NOx
- Despite this, much of the North Circular within Brent will remain above legal limits for NOx, as will a number of areas in north and south Brent

Scrutiny of commitments and scope for further action

The scrutiny inquiry broadly welcomes the initiatives Brent Council and the Greater London Authority has taken to address these problems, and is supportive of the direction of travel. The ULEZ and LEZ in particular will be instrumental in improving air quality in the borough, even in areas outside of the North Circular. Brent Council must give these initiatives its full support, and seek to raise awareness amongst residents about the positive impact it is due to have and the urgent need for these measures to be implemented.

Nevertheless, we feel there is scope for the Council, working with stakeholders across Brent, to further develop its measures to address the air quality impact of personal car usage, freight and procurement in a number of ways:

- **More could be done to raise awareness of the impact of the Ultra-Low Emission Zone, extension, and push for people to upgrade, sell or scrap their vehicles before October 2021.** The scrutiny inquiry has been advised by Transport for London that its awareness campaign will step up next year, and its focus will be on ensuring as many drivers as possible are compliant before the ULEZ takes place. The Council needs to play its part in this campaign and raise awareness through its own channels.

Brent must also strongly lobby the Government for a vehicle trade-in scheme to support small businesses and those on low incomes, building on the commitments already made by Transport for London.⁷⁹ This trade-in scheme must offer an equal incentive for drivers to switch to cycling, walking or public transport usage as it does for people to simply switch the model of car they drive. Whilst the April 2019 ULEZ introduction was able to achieve this by paying towards use of a Santander Cycle, this is not possible in outer London and further measures need to be taken.

- **There is insufficient focus on the need for a modal shift in the way we travel, with reductions in the proportion of journeys being made by car – either as part of the ULEZ**

awareness, or through wider messaging by the Council and TfL. Messaging about the ULEZ should not give the false impression that by switching to a compliant car, drivers are causing ‘zero pollution’: it should highlight the general health impact of all forms of vehicle travel, and not just those cars which are non-compliant with the ULEZ. This must also be reflected in Brent Council’s messaging and policies.

Whilst electric cars will, if more widely adopted, do much to reduce NOx exposure, many models do little to reduce PM levels, because some 80%-90% of PM emissions from cars come from non-exhaust sources.⁸⁰ In addition, the level of PM created by vehicles is positively correlated with their weight, and because of the weight of their batteries electric vehicles are 25% heavier on average than non-electric vehicles.⁸¹ The same argument applies to any large and heavy vehicles which have ULEZ-compliant engines, such as many SUVs. As we continue to successfully reduce NOx exposure from exhaust exposure, particularly diesel vehicles, the focus of our policies needs to shift to reducing overall levels of car usage: this means supporting the greater use of public transport, walking and cycling, and lobbying for better public transport access across the borough – all themes we will return to in Chapter 5.

- **As the ULEZ is extended to the border of the North Circular, the Council must closely monitor its impact on traffic levels – most especially in areas just north of the North Circular.** As noted previously, the introduction of the ULEZ in the congestion charge zone did not lead to any displacement just outside of the ULEZ. Nevertheless, given the different levels of car ownership in outer London, it is possible that behaviour patterns may be different once ULEZ is extended in October 2021.

Indeed, a recent study by Imperial College London and Clean Air for Brent partly investigated precisely this issue. As part of its research, the study carried out an online survey of 180 individuals living both inside and outside of the ULEZ to ask how they would respond to its introduction in October 2021, and compared responses between both samples. Whilst the sample is not necessarily representative, the proportion of respondents living outside the ULEZ who said they would choose to pay the daily charge was double that of those inside, whilst twice as many respondents living inside the ULEZ said they would choose to purchase a compliant vehicle.⁸² This suggests that the response to the ULEZ may differ in outer London boroughs, and underlines the need for further research to be undertaken to explore this further.

To this end, Transport for London advised the scrutiny inquiry that they have commissioned modelling experts to assess whether there will be any vehicle displacement or other negative impact from the ULEZ just outside the extended ULEZ. It is essential that Brent Council engages closely with TfL during this process, and works to understand the impact from the ULEZ. Should issues arise, the Council should consider further measures to address its impact, so that the whole borough can see improvements in air quality as a result of this policy.

- **Brent Council will need to revise its air quality focus areas, and update its policies, to respond to the impact of the ULEZ extension.** Whilst the ULEZ will deliver significant

positive impact in Brent, but it will not entirely address the health impact of poor air quality: the Council will need to adjust its policies, and shift its focus, in order to address those issues which ULEZ does not address. In particular:

- **The health impact of particulate matter is likely to become more of a focus in future.** The ULEZ is likely to partly improve this, but its main focus is reducing NOx and when we met with TfL, they had not carried out any specific analysis to date on whether the April 2019 ULEZ extension had achieved any reductions in PM (though they were confident that it had). Other policies will need to address this, and given the PM created by electric vehicles these will, to at least some extent, have to involve the promotion of public transport and active travel as an alternative to car usage.
- **The Council may need to revisit its Air Quality hotspots, and potentially identify new areas to the focus of activity.** Much of the North Circular and a number of areas either side of the North Circular are predicted to remain at illegal levels of NOx, yet not all of these are currently identified as air quality hotspots. We suggest the Council considers designating them as such, and devising a plan to bring them into compliance through measures which build on the ULEZ.
- **Brent Council needs to explore measures to complement and build on the ULEZ in areas which will require mitigating measures, particularly to combat non-resident driving and 'rat runs.'** Now that we are two years away from the ULEZ extension, Transport for London is actively considering and supporting initiatives to complement and build on the ULEZ in areas affected by the extension. They are particularly looking for measures which could encourage healthy streets and active travel, such as pocket parks, modal filters, Low Traffic Neighbourhoods and schemes to address issues related to non-resident travel.

The Council needs to seize this opportunity, and make healthy streets a central political and strategic priority for the borough – a theme we will return to in Chapter 5. So far as possible, the Council should of course endeavour to seek TfL funding for these initiatives, but they also need to provide match funding using money from the Local Implementation Plan, Community Infrastructure Levy and other funding sources.

- **The private sector, and any organisation impacting on air quality in Brent, needs to be involved in a wider and broad-ranging initiative to reduce the air quality impact of personal car usage, freight, deliveries and procurement.** At present, Brent's air quality action plan is too narrowly focussed on a relatively small range of initiatives in this area. Based on our engagement with other councils, and a review of other local authorities' plans, we feel that for Brent to lead successful initiatives in this area, it needs to take further action. In particular:
 - **It should convene a local forum or institution to identify ways to improve air quality in the borough.** Some inner London has been able to significantly reduce the air quality impact of freight and procurement through one such body: the Cross River Partnership. There is no similar institution in Brent, and the scrutiny inquiry feels it would be unlikely for the Council to devise ways to address the air quality impact of freight and procurement unless we convene a similar forum.
 - **The Council work with local organisations to agree shared targets to improve air quality.** Camden's air quality strategy includes specific targets on air quality from the

private sector and from other local organisations impacting on air quality, and the abovementioned forum should seek to do the same thing. Large companies like Tesco, Sainsbury's and IKEA Wembley have not taken sufficient action on air quality, and need to be challenged as part of this process to do much more in the borough.

- **The Council should work to minimise unnecessary deliveries directly to people's doors, seeking to encourage a 'green last mile', create delivery hubs, spread best practice across the housing sector and raise awareness of the air quality impact of these deliveries.** The scrutiny inquiry understands that some Quintain developments in Wembley have sought to address this by capping the number of delivery vehicles which can go to their buildings in an hour, thus forcing delivery companies to integrate their processes. Similar initiatives should be spread in housing developments across the borough, and where possible the Council should spearhead the development of convenient central 'delivery hubs' in accessible areas of the community.
- **There needs to be a specific strategy to address the air quality impact of non-residents travelling through the borough in cars, and work should be done to support the greater use of public transport and active travel by non-residents.** Whilst we support the diesel surcharge in CPZs, it is essential that the Council do more to address the air quality impact caused by non-residents travelling through the borough. This will help demonstrate to residents that a fair and consistent approach is being taken to address air quality, and that the whole community has a responsibility to improve air quality in the borough.

As part of this, we encourage the Council to work closely with the Football Association, Transport for London, Wembley Arena and others to identify a specific strategy to address the air quality impact of non-resident travel through the borough. Amongst other things, we suggest that the Council work with the Football Association to agree a variable cap on event day car usage for event days, and work with private car parks across the borough to apply a diesel surcharge to non-resident parking.

Linked with this initiative, we suggest that the Council particularly explore the impact of Nottingham City Council's initiative – unique across Councils in the UK – to introduce a levy on excess workplace parking spaces to pay for public transport in the city.⁸³ The Council should explore the scope for a similar highly-targeted initiative in Brent to address non-resident parking in certain targeted areas of the borough. Further steps can also be taken to enforce contraventions of event day parking restrictions by non-residents, and a public awareness campaign on air quality needs to be extended to the North Circular so it directly reaches non-residents travelling through the borough (we develop this proposal in recommendation 10).

- **The Council should lead by example, working to ensure that its own processes are up to the high standards it expects of all private and community organisations across the borough.** The current air quality strategy sets out some welcome intentions in this area, and is currently in the process of reviewing its contracts in a range of areas in advance of the re-tendering of a significant number of its contracts in 2021.

A clear timetable for this needs to be set, with a range of clearer targets adopted to green the Council's fleet and change its procurement processes. A workplace parking strategy also needs to be devised to reduce car journeys by Council employees and Councillors. It is only by spearheading these initiatives that the Council can convince the private sector and other actors operating in the borough that it is serious about the steps it is taking.

Recommendations

In light of the above, this scrutiny inquiry **RECOMMENDS**:

RECOMMENDATION 2:

THAT THE COUNCIL, IN CONSULTATION WITH TFL AND THE FA, AGREE A STRATEGY TO REDUCE THE AIR QUALITY IMPACT OF NON-RESIDENT CAR USAGE IN BRENT.

Brent Council, working with Transport for London, the Football Association and others, should put in place a dedicated strategy on non-resident car usage in the borough. This strategy will work to reduce non-resident car usage across the borough, and encourage people to use alternative modes of travel when visiting and driving through Brent.

As part of this strategy, the Council should consider:

- **Agreeing caps to non-resident parking with the FA on event days.** The present maximum provision of 2,900 commercial car parking spaces should never be exceeded, and no further commercial parking provision should be provided for event days. Indeed, significantly lower limits should be agreed on a case-by-case basis depending on the identified capacity requirements at individual events, with the Council adopting a presumption in favour of the lowest possible limits.
- **Working with Transport for London and the FA to reconsider the current redirection of bus routes during Wembley event days.** This risks sending completely the wrong message to both residents and non-residents alike, making it easier for people to drive than to use public transport. It should work alongside the FA to develop their proposals to stop this by improving infrastructure around Wembley Triangle, so that it will not need to be closed to public transport during event days.
- **Build on the diesel surcharge by working with Quintain, the FA and other commercial car parks in Brent to agree emissions-based parking charges,** along the same lines of Brent Council's diesel surcharge. This would help penalise the most polluting non-resident drivers, and encourage people to shift to lower emission forms of transport.
- **Reconsidering the current placement of event day Controlled Parking Zones, and updating it in light of new evidence of where it is taking place.** It should particularly consider extending them around tube stations in the borough. Such measures would prevent non-resident parking in more areas of the borough during event days, at a minimal annual cost to local residents. It could also support the FA and others in taking enforcement action against drivers.
- **Actively supporting proposals to expand railway, tube and public transport provision to reduce car usage on event days.** The Council should support measures to expand capacity in Wembley Stadium and Wembley Park and increase the number of railway journeys to Wembley Central station. We expand on these proposals in Recommendation 6.



- **Working with the FA to eliminate the use of pirate parking during event days.** We should work to undertake joint patrols with HM Revenue & Customs to tackle parking businesses which are not registered for tax purposes, and review the parking licenses of any car parks found to be undertaking pirate parking.
- **Taking measures to improve the enforcement of the event day CPZ,** including by considering larger fines for breaches (or lobbying for the levying of larger fines), because at present the fines for breaching the CPZ are comparable to the cost of using commercial car parks anyway. We should also ensure the CPZ is enforced at all hours, including late-day and weekend football matches, and consider the use of clamping and greater provision of vehicle toeing to combat non-resident parking.
- **Expand the use of public health messaging and awareness-raising about air quality along the North Circular, and during event days.** We expand on this proposal in Recommendation 10, when we consider the role that public health messaging and awareness-raising could play in addressing issues with air quality.
- **Encourage greater use of cycling to event days,** by increasing cycle storage provision around the stadium and providing a route to the stadium via the forthcoming Willesden-to-Wembley Cycle Superhighway.
- **Consider the potential merits of a highly targeted levy to tackle non-resident parking in the borough, along the lines of that implemented in Nottingham.** The Council should explore the applicability of this levy to Brent, and identify whether highly targeted areas of the borough could benefit from a similar levy, with the proceeds used to fund affordable public transport initiatives. It should actively work with London Councils which are considering similar limits, such as Hillingdon and Camden.
- **Demanding that IKEA Wembley, Tesco and other supermarkets and retail stores take urgent steps to promote active travel and lower-emissions travel from non-residents to their stores in Brent,** including by installing electric vehicle charging points in car parks, making provision for more cycle storage and working to improve pedestrian and cyclist access to their stores.
- **Working, in full consultation with residents, to take measures against non-resident driving through residential streets in Brent, including rat runs.** This could include measures to block through-traffic through residential streets, along the lines of schemes implemented in Waltham Forest (see Recommendation 5 for further details). Such measures should only be implemented with the consent of local residents and on a case-by-case basis, in response to local concerns about non-resident driving.
- **Considering the use of Low Emission Neighbourhoods in areas heavily impacted by non-resident driving and event day activities,** in order to prevent high-emission vehicles from travelling in these areas. This should be a particular priority in residential streets heavily impacted by event day activities and non-resident driving on and around the North Circular and other major roads in Brent.

RECOMMENDATION 3:

THAT THE COUNCIL SET UP A GREEN BRENT PARTNERSHIP: A FORUM WITH ORGANISATIONS IMPACTING AIR QUALITY IN BRENT –INCLUDING THE PRIVATE SECTOR, COMMUNITY ORGANISATIONS AND CAMPAIGN GROUPS – TO AGREE SHARED TARGETS TO IMPROVE AIR

QUALITY LOCALLY. WE SHOULD ALSO LEAD BY EXAMPLE BY TAKING STEPS TO REDUCE THE AIR QUALITY IMPACT OF BRENT COUNCIL'S OWN ACTIVITIES.

Building on the success of Brent's Climate Assembly, and learning lessons from similar initiatives in central London such as the Cross River Partnership, Brent Council should establish an ongoing forum with stakeholders in Brent (working title: 'Green Brent Partnership'), to identify ways we can all work together to improve air quality in the borough. Members of the partnership should include, but should not be limited to, the Royal Mail, IKEA Wembley, local supermarkets, the Football Association, retail outlets such as London Designer Outlet, food providers, Clean Air for Brent and Brent Cycling Campaign.

The Green Brent Partnership should work with stakeholders in Brent to, amongst other things:

- **Agree a shared set of goals to improve air quality in the borough**, and regularly monitor and provide updates on progress in meeting these goals. Each member of the partnership which has an impact on air quality locally should agree these targets, and the Council should play a leading role in assessing their progress in meeting these objectives.
- **Developing a freight strategy for Brent to integrate procurement and delivery processes to minimise impact on air quality.** This should draw from the expertise of the West London Alliance, West Trans and the Cross-River Partnership. As part of this, the Council should conduct a pilot into integrating procurement processes in a town centre in Brent; review the journey times of delivery vehicles to minimise travel during rush hour; and work with businesses to improve emissions standards of delivery vehicles.
- **Encourage people and businesses to use zero emission forms of delivery**, such as the 'green last mile': using bikes rather than vehicles to deliver goods to their final destination.
- **Encourage residential developments in Brent to streamline and reduce vehicle deliveries**, encouraging residents and businesses to pool deliveries to reduce air quality impact and deliver items to community 'hubs' rather than directly to residential areas. Sites such as Box Park, local supermarkets, community libraries and every local station in Brent should be considered as potential locations for these hubs.
- **Promote the provision of cycle storage, electric vehicle charging and emissions-based parking charges in customer car parks across the borough**, including in IKEA Wembley, local supermarkets and commercial car parks.
- **Promote and highlight the savings which businesses could make from better procurement processes**, whilst at the same time significantly improving air quality. Where measures are not cost-saving, the Council should review the possibility of a scheme to provide business rates relief to these businesses in order to incentivise measures which deliver public health benefit.

In each of these cases, Brent Council itself should also lead by example, to show the way to organisations throughout Brent. We recommend that the Council:

- **Set a clear timeline for greening its own fleet**, including bin lorries and council vehicles, as part of its 'Project 2023' initiative.
- **Review the travel times of Council vehicles**, to minimise travel during rush hour and areas of worst air quality impact where possible.

- **Establish the impact which poor air quality, is having on its own council employees and contractors**, in order to encourage all other employers to meet their legal obligations in this area.
- **Develop a workplace ‘green travel policy’** for Council employees, Councillors and others who use Brent Council facilities, minimising the use of car travel and supporting the use of active travel and public transport.
- **Regularly review and report on the air quality impact of Brent Council’s pension fund investments**, and seek to invest in initiatives with minimal poor air quality impact where this is prudent and consistent with the Pension Fund’s fiduciary duties.
- **Ensure the materials used in the Council’s own manufacturing process keep air quality and environmental damage to a minimum**, including footways and housing improvements.

RECOMMENDATION 4:

THAT THE COUNCIL CLOSELY MONITOR AND REVIEW THE AIR QUALITY IMPACT OF CURRENT POLICIES, MOST PARTICULARLY THE ULTRA LOW EMISSION ZONE, AND CONSIDER IMPLEMENTING AND/OR LOBBYING FOR STRONGER MEASURES IF NECESSARY. IT SHOULD ALSO KEEP THE PROVISION OF AIR QUALITY MONITORING SITES UNDER CONSTANT REVIEW.

A number of positive steps have been taken to improve air quality in the borough, and evidence suggests that the forthcoming Ultra-Low Emission Zone (ULEZ) extension to the border of the North Circular will be by far the most effective in improving air quality in Brent. The Council should support this extension and seek to raise awareness about it, whilst also lobbying Transport for London and the Government for a trade-in scheme for those residents and businesses who currently use vehicles which are non-compliant with it.

But the ULEZ, and other policies, may also have knock-on effects which necessitate the use of further measures to improve air quality. There are also considerable concerns from residents just outside the ULEZ, especially those on the North Circular itself, who feel they will not see sufficient air quality benefits from the ULEZ.

We therefore recommend that the Council:

- **Raise awareness of the ULEZ extension to Brent residents and seek to build public support for it**, by highlighting the health benefits it will bring and seeking to secure a vehicle trade-in scheme for affected residents and businesses from the Greater London Authority and the Government
- **Seek to maximise the number of people who switch to active travel and public transport as a result of the ULEZ**, by making public transport usage and active travel easier and more affordable; and ensuring all vehicle trade-in schemes for non-compliant vehicles provide an equal and opposite financial incentive for drivers to switch to active travel and public transport instead.
- **Pay particular regard to the impact of the ULEZ north of and including the North Circular, and consider the provision of measures such as Low Emission Zones and other initiatives should progress be insufficient** – for example, if an increased number of vehicles park ‘just’ outside the ULEZ and enhance traffic pressures.

- **Work closely with other Local Authorities along the North Circular to agree a shared approach to the ULEZ,** and jointly lobby TfL on this area where air quality impact is not sufficient.
- **Review the impact that the ULEZ has on inequality in air quality in the borough.** Whilst the south of the borough currently tends to have the greatest issues in air quality, the ULEZ extension may necessitate a shift in focus towards the north of the borough where progress is less positive, and this may necessitate the use of further measures.
- **Particularly closely review the impact of the ULEZ on residential areas along the North Circular.** The scrutiny inquiry is deeply concerned about the considerable health effects of air pollution on these residents, and feels this needs to be particularly closely explored in any reviews of the ULEZ.

In addition, the Council should also continue to keep the provision of air quality monitoring stations under constant review. It should consider the provision of further monitoring stations where this may be necessary (eg to explore the impact of event days). However, the Council should also be clear to only use and promote effective air quality monitoring devices commissioned from reputable institutions, such as the London Air Quality Network from King's College London. It should actively discourage residents, businesses and other public bodies from using poorer-quality and ineffective monitoring devices, and should encourage them to instead direct their funds towards measures which will tackle the underlying causes of poor air quality.

Chapter 5

Public transport, walking and cycling

Brent's current situation

Modes of travel in Brent

Public transport and active forms of travel can make a significant contribution to improving air quality, and in all cases should be preferred over private car usage. In addition, Brent's population is forecast to increase by 20%, equating to 64,900 people, in the next 23 years, our existing road infrastructure will not be able to sustain this number of people using private transport.⁸⁴

If it is therefore essential that there is a 'model shift' in the way we go out and about in the borough, and that steps are taken to make it easier and cheaper for people to travel using public transport or active forms of travel in the years to come. At present, however, cars are responsible for almost half (45%) of traffic volume in Brent, whilst walking is responsible for 32% and bus usage for a fifth (see Figure 15 below).⁸⁵

As the Council itself acknowledges, there is also "a distinct north-south divide" in Brent. South of the North Circular, modes of travel are "more typical of people living in inner London", whilst in the north they are "more typical of an outer London borough".

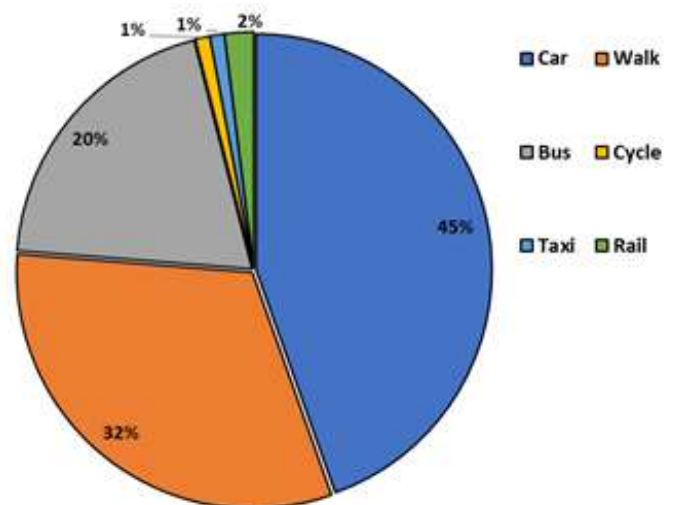
Office for National Statistics figures show that:⁸⁶

- On average, **less than 50%** of households in the south of the borough own a car, and residents there use a car for **less than a quarter** of journeys
- In the north, **68%** of households own at least one car, and residents use the car for **half** of their journeys

Public transport

These differences in use of public transport are likely at least partly driven by inequalities in access to good public transport across the borough. Indeed, as noted in Chapter 4, there is an association between levels of car ownership and public transport accessibility. Brent overall is well-served by public transport, with 52 daytime bus routes, 14 night bus routes and 26 Network Rail, London Overground and London Underground stations in the borough. However public transport

Figure 15. Modal split of total traffic volume in Brent in 2017.
Source: Brent Council's draft Local Implementation Plan 3



accessibility varies across our community, with stark inequalities in access between north and south.

Table 4 to the right provides a breakdown of Public Transport Accessibility Levels (PTALs) for every ward in Brent (PTALs are a statistical method used by TfL to calculate how accessible each neighbourhood in London is to public transport). The majority of Brent's wards (12/21) have relatively poor PTAL levels, and only two of Brent's wards – both in the south of the borough – have PTAL towards the higher end of the scale. It is significant that only one ward north of the North Circular (Wembley Central) has a PTAL level above 2.⁸⁷

Finally, it should also of course be acknowledged that diesel buses make a significant contribution to air pollution, and as noted in Chapter 1 TfL buses responsible for around 7% of PM2.5 and PM10 emissions and 17% of NOx emissions in the borough. The scrutiny inquiry also recognises that there are particular areas of Brent which are particularly affected by high levels of emissions caused by public transport, such as Chamberlayne Road, which we visited as part of our scrutiny inquiry. Whilst greater use of public transport, including buses, is an instrumental means of improving air quality, it is essential that Transport for London works to 'green' its bus fleet as soon as possible.

Encouragement of active travel, such as walking and cycling

To compound this issue with public transport access, in common with many London boroughs straddling inner and outer London and separated by the North Circular, the built environment in Brent is not always conducive to active forms of travel, such as walking and cycling. In a July 2019 report, a coalition of active travel campaign organisations produced a 'Healthy Streets Scorecard' of all London boroughs.

This produced a rank of London boroughs, from 1 to 10, by bringing together data from eight different sources – including mode of transport, road usage and road casualties. The scores of all London boroughs are contained in Figure 16 below.⁸⁸ Using this metric, Brent is in the bottom half of the London league table, ranking 19th out of 33 London boroughs on the 'healthy streets' scorecard, although we do rank relatively well compared to most outer London boroughs (5th out of 19 boroughs).

This means that despite some positives, there is significant room for improvement in Brent, and we may wish to pay particular regard to the relatively better scores of outer London boroughs with similar geographic challenges to ours – particularly Haringey (the best-scored outer London borough) and Waltham Forest (with the second-best score of any outer London borough).⁸⁹

Table 4. Public Transport Accessibility Levels (PTALs) in Brent's Wards.

Source: Transport for London. Each area in London is graded between 0 and 6b, where a score of 0 is very poor public transport access and 6b is excellent access.

WARD	PTAL LEVEL
NORTHWICK PARK	2
PRESTON	2
STONEBRIDGE	2
WELSH HARP	2
BARNHILL	2
FRYENT	2
SUDBURY	2
ALPERTON	2
TOKYNGTON	2
KENTON	2
DOLLIS HILL	2
QUEENSBURY	2
WEMBLEY CENTRAL	3
KENSAL GREEN	3
HARLESDEN	3
WILLESDEN GREEN	3
BRONDESBURY PARK	3
DUDDEN HILL	3
MAPESBURY	3
QUEENS PARK	4
KILBURN	5

Figure 16. 'Healthy streets' scorecard of all London boroughs. Source: London Cycling Campaign. All boroughs ranked from 1 to 10 based on data from eight different indicators.⁹⁰



Existing commitments by Council and GLA

Active travel

Both the Council and GLA have been clear and ambitious in how they want to make it easier for people to use alternative forms of travel. The GLA's Transport Strategy aims that by 2041, 80% of all trips in London to be made by walking, cycling and public transport usage, and for all Londoners to do at least 20 minutes of active travel a day.⁹¹ In turn, Brent's third 'Local Implementation Plan' for the GLA's transport strategy (LIP 3), covering the period 2019-2041, sets out how we intend to implement this at a local level in the coming years.⁹²

Consistent with this, both the GLA and Brent Council have set out a number of aims to try and achieve these goals:

- Regular temporary car free days in the borough, to promote the use of alternative modes of transport and help create a 'buzz' and some enjoyment around car free travel
- Providing infrastructure to support cycling and walking

- In written and oral evidence, the Scrutiny Inquiry has been advised that Brent Council is actively lobbying for routes to promote active travel, with a 5km Wembley to Willesden Junction Cycle Superhighway in the late stages of planning. This will be the first major cycle route in North West London, and was committed to by the GLA in January 2018.⁹³
- The Council has recently taken a lead in the promotion of convenient, hop-on hop-off electric ‘Lime’ bikes across the borough, with the Council becoming one of the first boroughs in London to introduce them.⁹⁴
- The GLA has set out a ‘Healthy Streets for London’ approach, prioritising walking, cycling and public transport in order to encourage their usage in the years to come.⁹⁵
- In May 2019, Brent Council won ‘gold’ at the London Transport Awards under the ‘excellence in cycling and walking’ category, particularly for its work in engaging 23,000 pupils in behaviour change programmes such as Bike it Plus. This led to an 85% increase in children cycling regularly, and contributed to a trebling of the number of journeys made by bike in Brent since 2013.⁹⁶

Public transport

The scrutiny inquiry recognises that both the Council and, in particular, Transport for London, have made a number of commitments in order to improve public transport accessibility across the borough, and the Council is also actively lobbying for improvements in a number of areas:

- Working with Brent Council and other councils along the route, Transport for London is in the process of developing a West London Orbital line, running along the Dudding Hill line (currently used only for freight) in the north of the borough and then going south to connect Brent Cross and Wembley to Old Oak Common and the Great West Corridor.⁹⁷
- Brent’s third Local Implementation Plan for the GLA Transport Strategy, covering the period 2019-2041, sets out a range of initiatives to improve public transport and promote active travel in the borough in the coming years, and has identified a range of localised borough targets for delivery of the Transport Strategy. Public transport initiatives include, amongst other things:⁹⁸
 - Initiatives to upgrade signalling and control systems in the Piccadilly and Bakerloo lines
 - Exploration of a bus rapid transit network for orbital links between Brent Cross and Ealing
 - Consolidation of existing 20mph zones and to have a phased approach to deliver a borough-wide 20mph strategy from 2020-2025
 - Neasden transport improvements from 2020-2025, to provide “improved public realm, air quality and accessibility to public services”
 - Addressing issues with public transport accessibility in Alperton through the Alperton Master Plan
- Partly as a result of the ULEZ extension and other policies by the GLA, Transport for London and Brent Council are due to review bus routes in Brent and explore the need for additional bus provision, particularly in the north of the borough.⁹⁹

In addition to this, Transport for London has set a range of targets to improve the air quality of its bus fleet:

- 12 areas of London were designated Low Emission Bus Zones, where all scheduled buses travelling through these areas now meet or exceed the latest Euro VI emissions standards, which can reduce NO2 emissions by up to 95%. Buses on these routes include a mix of new Euro VI buses, old buses retrofitted to Euro VI standards, hybrids which meet or exceed Euro VI standards and electric buses which cause zero tailpipe emissions.¹⁰⁰
- Since 2014 all new buses have been equipped to Euro VI standards, and are being introduced at a rate of 700-1000 a year.¹⁰¹ By 2020 all TfL buses across London will meet Euro VI standards. They will either be new buses with Euro VI compliant engines or will be old buses retrofitted to Euro VI standards. In an evidence session with TfL, the scrutiny inquiry, when asked, received explicit assurance that old buses retrofitted to Euro VI standards will have exactly the same air quality impact as new Euro VI compliant buses.¹⁰²
- From 2020, all new single decker buses entering the fleet will be zero emission (at tailpipe), although of course these buses will create PM 2.5 and PM 10 through non-exhaust sources.
- By 2037 at the latest, all 9,200 buses across London will produce zero emissions from the tailpipe. By 2050, it is aimed that London's entire transport system will be zero emission at the tailpipe.¹⁰³

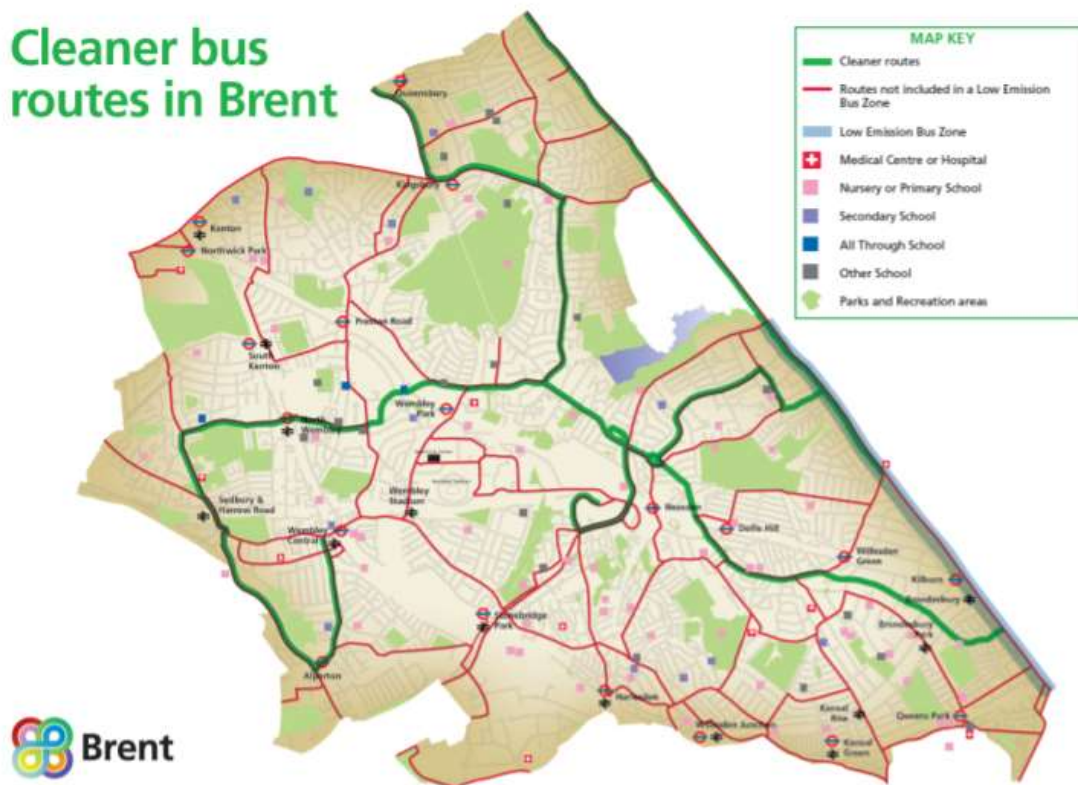
Figure 17 below, sourced from Brent Council's draft Local Implementation Plan 3, gives a map of the bus routes in Brent which have thus far been designated cleaner routes or are in Low Emission Bus Zones. One part of Brent (Kilburn to Maida Vale) benefitted from being designated a Low Emission Bus Zone. In addition, three of the proposed twelve Low Emission Bus Zones to be implemented by 2020 are to benefit Brent in some way.¹⁰⁴

The Scrutiny Inquiry was disappointed that other areas in Brent which are poorly-affected by low air quality from buses, most particularly Chamberlayne Road and Harlesden High Road, were not designated Low Emission Bus Zones at the time. We feel that based on the evidence of air quality in these areas, action there could and should have been taken sooner.

However, as a result of the further commitments made by TfL, by 2020 all future routes are to meet the more stringent Euro VI standards anyway and as such will effectively have the same air quality standards as if they had been Low Emission bus Zones. This will effectively make the Low Emission Bus Zone policy redundant by 2020.¹⁰⁵

In our engagement with Transport for London, Brent Council has been advised that we should therefore change our strategy for engagement with TfL and bus contractors in light of this: if we want to increase the number of electric bus routes going through Brent, we will need to engage with bus contractors in Brent as and when local contracts expire, in order to support them in making an attractive business case to Transport for London to prioritise our bus routes. We reflect this in our recommendations later in this chapter.¹⁰⁶

Figure 17. Cleaner bus routes in Brent: commitments from TfL. Source: Brent Council's draft Local Implementation Plan 3.¹⁰⁷



Scrutiny of commitments and scope for further action

Public transport

Brent Council held a scrutiny meeting with Transport for London which discussed in detail the air quality standards and accessibility of our public transport, how Brent could best lobby for better standards in public transport and improved accessibility across the borough. As already noted, we also commissioned a report from Brent Council which was specifically dedicated to exploring what further steps our statutory partners, including TfL, could take to further improve air quality in the borough.

Based on these discussions, and on our wider review of our evidence base, we feel that Brent Council and Transport for London needs to pay further regard to the following:

- **Now that all buses to be Euro VI compliant, Brent Council's focus needs to shift to encouraging the fast adoption of zero-emission buses in the borough.** Unless future leaders in London change TfL policy, there will be no repetition of the previous geography-focussed policy of implementing Low Emission Bus Zones.

Rather, the electrification / hybridisation of future bus routes will be decided on a case-by-case basis, as and when existing contracts expire. It will depend on the business case made by bus operating companies, which will depend in part on the cost of operating electric routes on the bus route in question.

Brent Council needs to adapt to this. We need a strategy to support bus operators in making their business cases for electric buses in all bus routes operating in Brent, as and when contracts expire. We have obtained this data from Transport for London, and a full list of expiry dates for Brent bus routes has been provided to the scrutiny inquiry by Transport for London during the process of this inquiry.

- **Transport for London could do more to address the air quality impact from non-exhaust sources, such as the particulate matter created by electric buses; and explore when (and where) hybrid buses will travel in diesel mode.** The GLA's existing commitment to make all buses "zero emission" by 2037 risks reinforcing misperceptions about the air quality impact of electric vehicles, and many of the concerns the Scrutiny Inquiry raised in Chapter 4 of this report, on car travel, are equally applicable to the bus network.

The Scrutiny Inquiry also asked TfL about how hybrid buses will alternate between diesel and electric mode, due to concerns from some residents that by the time these buses arrived in Brent they will be out of power and stuck on diesel mode. Whilst they reassured us that there was no explicit geography-based criteria for when these buses enter diesel mode, we were not provided information to reassure us that – for some unrelated reason – these buses would not end up in diesel mode by the time they reached outer London boroughs.

To address these issues, both Transport for London and Brent Council need a strategy to address the wider air quality impact of London's bus fleet, and reassurance about the air quality impact of hybrid buses needs to be provided. Future electric vehicles need to be designed in such a way as to minimise non-exhaust emissions, by utilising the latest technology, and the private sector needs to be actively encouraged to innovate in this area.

- **Brent needs to set out plans to actively lobby for better bus transport access to certain areas of the borough, and work with TfL to significantly improve Public Transport Accessibility levels in these areas.** If the GLA and Brent's LIP 3 report are serious about the target to significantly increase the proportion of non-road journeys in Brent, LIP 3 needs a strategy to increase accessibility of the north of the borough to green, clean and quiet electric buses. The Scrutiny Inquiry feels it will be impossible to meet these ambitious objectives without significant improvements in PTAL levels across the borough, most especially north of the North Circular.
- **Brent Council needs a strategy to lobby for improvements in the affordability of public transport across the borough.** Charges for Brent's stations on the Jubilee, Bakerloo and Piccadilly lines increase very steeply in just a few stations, and cover zones 2-4 of TfL's charging zone. Similar boroughs positioned around the North Circular, notably Waltham Forest, do not have the same challenge, and despite being at the other end of the Jubilee line Stratford has received a special dispensation from TfL and is in zone 2/3. The Scrutiny Inquiry encourages Brent Council to lobby for the same, and to enshrine this objective in Local Implementation Plan 3.



Walking and cycling

The scrutiny inquiry held a meeting with Brent Cycling Campaign and London Cycling Campaign which was specifically dedicated to encouraging active forms of travel. We also held an evidence session with Transport for London dedicated to active travel, and regularly raised this issue in meetings with Brent Council. We also received evidence from a number of groups which addressed active travel, such as evidence from 20's Plenty.

Based on this information, and following scrutiny sessions with the Council, we feel that future strategies by Brent Council and Transport for London need to pay regard to the following factors:

- **Drawing from the experience of Waltham Forest Council, Brent Council needs to make healthy streets a central political and strategic priority.** Waltham Forest has a number of similar challenges to Brent, straddling inner and outer London and with the North Circular going through it. Yet despite this, the borough performs considerably better than Brent on the 'healthy streets' scorecard (see Figure 16) and has had considerable success in encouraging active travel through a range of initiatives on residential roads – including modal filters, Low Traffic Neighbourhoods, cycle lanes, pocket parks, mini-Hollands and the greater provision of cycle parking facilities.

The Scrutiny Inquiry met with Waltham Forest Council during the process of this inquiry, and also held a site visit in Waltham Forest to look at the initiative in further detail.¹⁰⁸ We were advised that in order to support the wider adoption of these schemes and promote healthy streets, Councils need to make healthy streets a central political and strategic objective, incorporated into everything the Council does rather than siloed off into a specific area. We were further advised that the Highways department, and not Transport, should hold ultimate responsibility for spearheading the initiative, as they have more day-to-day involvement in place-building and as such will be able to integrate it into their processes.

All of the successful schemes brought forward in Waltham Forest had the full support of local residents on the streets they concerned, and the Council followed a policy of only working in those areas where there was public support for these initiatives. In areas which did take them up, tackling non-resident driving – and particularly 'rat runs' through residential streets – were often a key reason why residents supported these changes. We suggest the same approach is followed in Brent Council, with the whole Local Authority – with the Highways team at the lead – working with supportive residents to offer these solutions as a potential issue to street issues they raise, particularly non-resident driving and parking on residential roads.

- **Future initiatives to encourage active travel – most particularly the Willesden-Wembley Cycle Superhighway – need to involve wider community and expertise at the earliest stages, so they can input on ideas around how best to encourage active travel at a point where they can genuinely effect change.** The Scrutiny Inquiry received positive feedback from a number of witnesses about some active travel initiatives in Brent, However we received less positive feedback about some others, which witnesses felt were not built to sufficiently high standards.

In cases where Brent Council and TfL were perceived to fall short, this was put down to the fact that engagement on route design took place at too late a stage, at a point when stakeholders were unable to significantly effect change. We received positive feedback about the Brent Public Transport Forum and Brent Active Travel Forum, which previously did involve stakeholders in these discussions and could act as a forum through which to have these discussions. The Scrutiny Inquiry feels that future plans need to involve the wider community at the earliest stage, and a reinvigorated Brent Public Transport Forum and Brent Active Travel Forum – or a new set of bodies – should play a central role in having early dialogue about the design of future active travel initiatives.

- **Both the Council and TfL need jointly to develop a specific, dedicated strategy to improve accessibility over the North Circular.** Throughout the course of the Scrutiny Inquiry, accessibility over (and under) the North Circular has proved a key and central concern. Pedestrians and cyclists alike find it difficult to take up active forms of travel due to the barrier provided by it, and the lack of routes over or under it at critical points along it. Brent Council and Transport for London need to devise a strategy to address these issues, and Brent Council's desire to improve access routes over the North Circular needs to be expressly acknowledged and set out in LIP 3. We have raised this with TfL and have initially been advised that any such access routes could prove prohibitively expensive, but we feel this needs to be set against the significant contribution they could make to meeting the GLA's Transport Strategy objectives and the cost savings due to the reduced health impact caused by travel.
- **Policies dedicated to active travel need to address public concerns about the 'safety' of walking and cycling.** When asked in surveys about the barriers to taking up cycling, 'safety' is regularly cited as the key reason why people are averse to taking up cycling.¹⁰⁹ Much of this concern is due to a misplaced *perception* that cycling is unsafe, but it is thought to be driven by:
 - A feeling that the built environment is 'built for' cars and not pedestrians or cyclists
 - Concerns about the way some drivers go out and about, such as how they sometimes 'cut through' cyclists
 - The limited dedicated space available to cyclists and pedestrians on a number of routes
 - Issues with the speed of vehicles on a number of major routes in the borough. These routes also often happen to be the easiest and most convenient routes for cyclists to get out and about in the borough, so can significantly discourage take-up
 - Concerns about the storage of bikes, and the ability to keep bikes kept away safely and securely in-between journeys – when at work, at home or when shopping

Brent Council and Transport for London strategies need to have, as a central objective, the need to address public concerns about the safety of active travel. Many other necessary policies to improve the built environment flow from on from this policy.

- **Future active travel initiatives in Brent also need to consider the safety and accessibility of residential routes, outside of main routes.** In our meeting with witnesses engaged in the promotion of active travel, this has emerged as a key and often-overlooked issue.

Whilst cyclists tend to predominantly travel through main routes to get to and from work, there are significant concerns about the safety of some residential routes – such as the speed of some vehicles, and the use of residential routes as ‘rat runs’ by drivers – which can significantly affect their willingness to take up cycling.

Brent Council needs to explore this issue in detail and take specific steps to improve safety and accessibility in residential routes. This should include reviewing speed limits on these routes on a case-by-case basis, where they exceed 20mph, building on the Local Implementation Plan 3’s existing commitment in relation to a borough-wide 20mph strategy. The use of residential routes as ‘rat runs’ should also be actively discouraged, and it is possible that steps to address this could attract the support of both local residents and cyclists.

- **All future cycling initiatives need to be disability-inclusive, promoting a wider range of cycling than simply bicycles.** We have heard concerns from stakeholders that some initiatives in London boroughs inadvertently block the use of forms of active travel for those with disabilities, such as three-wheel cycling. Narrow cycle lanes can stop people with disabilities from engaging in active travel, as too can measures such as gates to slow down cyclists or prevent the use of motorbikes on alleyways.
- **The Council should prioritise the provision of cycle storage space just as much as electric vehicle charging points.** The lack of cycle storage space can significantly affect people’s willingness to take up cycling. The Council’s air quality action plan currently neglects questions and concerns about storage space in existing residential premises (including social housing and private rented homes) and on streets, and there is a need for an update on the commitments in the Brent Cycle Strategy in relation to cycle storage and cycle parking.¹¹⁰

The Council should take steps to address this, including by:

- Investing in cycle storage space in social housing developments (or encouraging residents to seek funding for this outside of the Housing Revenue Account, through the Community Infrastructure Levy or other sources)
 - Encouraging private landlords to support cycle storage in private rented homes, through the licensing system and through engagement with landlords in forums
 - Ensuring that the Green Brent Partnership actively encourages businesses and others in the borough to facilitate easy cycle storage in their premises
 - Actively pursuing opportunities to create cycle storage space in town centres and communal areas, through the use of CIL money or otherwise, to enable residents to make short cycling trips to town centres for shopping, social activities, etc
- **Future vehicle trade-in schemes for electric vehicles – whether driven by Government, the Greater London Authority or Brent Council – need to provide equal incentives for the take-up of active forms of travel.** An individual looking to trade-in their car to avoid ULEZ should be offered an equal incentive, to an equivalent financial value, to instead forego a car entirely and take up active forms of travel (or use public transport). The



Scrutiny Inquiry is glad to see this reflected in the GLA's current trade-in scheme, but it is essential that all future schemes continue in the same vein, and Brent Council should lobby to ensure this.

Recommendations

In light of the above, this scrutiny inquiry **RECOMMENDS**:

RECOMMENDATION 5

THAT THE COUNCIL MAKE THE DELIVERY OF HEALTHY STREETS A CENTRAL CORPORATE AND POLITICAL PRIORITY ACROSS THE BOROUGH, WORKING CLOSELY WITH LOCAL RESIDENTS TO EXPAND THE NUMBER OF HEALTHY STREETS LOCALLY.

Responsibility for delivery of this should involve all Departments in Brent, but should ultimately rest within the Highways Department and not Transport, because Highways will be able to integrate this approach within their operational work and routinely consider this whenever they consult on schemes or works need to be carried out. This also needs to feature centrally in a future Borough Plan, in Local Implementation Plan 3 and in the Local Plan.

In order to deliver this priority, Brent Council should set out a minimum offer to streets across the borough when considering improvements to areas:

- **Routinely consider how we can support healthy streets all our infrastructure and transport projects**, ensuring our highways team and others regularly consider how they can better-promote healthy streets and active travel whenever works are due to take place or improvement projects are being carried out. As part of this, the Council should also proactively identify a list of streets in the borough which are most impacted by poor non-resident parking behaviour, such as rat runs, and work with these streets to introduce measures to address these issues.
- **Engage people on healthy streets initiatives at the earliest stage of projects, so they can genuinely feed into the process of developing ideas**. This will help address concerns that some early cycling infrastructure projects in Brent were as well-designed as they could be, and were consulted on too late in the developmental process. The Brent Public Transport Forum and Brent Active Travel Forums should be reinvigorated, with an expanded remit, to help ensure these conversations take place as early as possible and future projects are delivered to the highest standards. We should review the membership of these forums to ensure that campaign groups engaged in active travel in Brent have ex-officio membership of it.
- **Engage with residents about initiatives to tackle non-resident driving in residential streets**, such as blocking through-routes, 20mph speed limits, Low Traffic Neighbourhoods and modal filters, in order to make streets more friendly and accessible for residents. This raft of measures needs to be part of Brent Council's 'toolkit' whenever residents raise concerns about non-resident driving, building on our proposal in recommendation 2. Such initiatives should only be carried out with the consent of local residents and considered on a case-by-case basis where it is appropriate for local streets, and should be focussed on tackling residents' concerns about non-resident parking.
- **A more consistent and clear approach to the provision of 20mph zones needs to be established**. For many of these initiatives, 20mph speed limits will be an essential prerequisite

to delivering other aspects of the healthy streets approach, and this should be factored into highway improvements. Greater provision of 20mph zones across the borough are also easier to enforce than piecemeal zones.

- **Give the provision of cycle storage, and cycle parking the same level of priority as electric vehicle charging.** Working with TfL, the Council should routinely look for opportunities to expand cycle storage space, most especially around tube stations. Opportunities to provide cycle storage in under-utilised car parking bays or on wide footways need to be routinely explored. Residents should be invited to bid for cycle storage using Community Infrastructure Levy funds. The Council should work to enhance the cycle storage capacity of its own housing stock, and continue to press for similar standards from Registered Providers, developers, businesses and others.
- **Ensure additional cycling space is not delivered at the expense of pedestrians, and vice-versa,** as has sadly sometimes been the case in other developments. The presumption should be in favour of encouraging active travel through reducing space for private car usage, or through creating extra space in other ways.
- **Review the current maximum provision of parking permits for households in Controlled Parking Zones,** with particular regard to the parking pressures caused by the larger number of permits which can be claimed by Houses of Multiple Occupation. The Council should seek to move away from the current “one size fits all” approach to CPZ permits regardless of household type or location. A cap on the number of permits in HMOs could significantly reduce parking pressures in some residential areas, freeing up space for greater provision of more space for active forms of travel.
- **Extend the diesel surcharge to pay and display parking,** building on the current surcharge in controlled parking zones, in order to deliver a clear and consistent message about the impact of poor air quality and encourage the use of active travel and lower emission vehicles.
- **Continue to promote and expand the use of car free days,** building on the successful initiatives already established. The scrutiny inquiry feels that Brent’s year as London Borough of Culture 2020 offers an enormous opportunity to promote the benefits of car free days on our streets, and our borough of culture team should exploit all opportunities to promote successful car free days on streets throughout 2020.
- **Ensure all future cycling initiatives are disability-inclusive,** and support the use of a wide range of cycling devices and not just bicycles. This requires the provision of sufficiently wide cycle ways, and it means avoiding certain traffic calming methods or blocks which – whilst easy for bicycles to get around – may prevent people with disabilities from using active travel methods.

RECOMMENDATION 6

THAT THE COUNCIL OUTLINE, PUBLISH AND CONSULT ON A CLEAR STRATEGY FOR ENGAGEMENT WITH TRANSPORT FOR LONDON ON ACTIVE TRAVEL INITIATIVES – INCLUDING THE PLANNED WILLESDEN-WEMBLEY CYCLE SUPERHIGHWAY, MEASURES TO IMPROVE PUBLIC TRANSPORT PROVISION AND ANY FUTURE INITIATIVES TO IMPROVE ACCESSIBILITY OVER THE NORTH CIRCULAR.

During the course of our inquiry, we have become aware that there are plenty of ideas across the borough on how we could better-promote active travel across the borough, and improve our infrastructure to make it easier for pedestrians and cyclists to go out and about.

In order to identify and exploit these opportunities, Brent Council needs to be open about its approach to engagement with TfL, using new forums – like the recently-convened Brent Climate Assembly, and the Green Brent Partnership (see recommendation 3) – to engage with residents about potential opportunities.

In drawing up this strategy, Brent Council should:

- **Make improving safety for pedestrians and cyclists a key corporate priority**, and address the misplaced *perception* of safety issues through improvements to the built environment.
- **Look to improve pedestrian and cyclist accessibility over the North Circular**, in order to reduce barriers between north and south Brent and promote more active forms of travel. The Council should work with TfL to explore the provision of more bridges over the North Circular in order to achieve this.
- **Actively lobby to improve public transport accessibility in under-served areas of the borough**, most particularly areas north of the North Circular with low Public Transport Accessibility Level ratings. The Council should work with TfL to devise a strategy to improve PTAL levels in areas of the borough where provision is poor.
- **Work with bus contractors to speed up the adoption of electric buses across Brent, as and when existing contracts expire**. The speed at which electric buses are adopted in Brent will depend on the strength of the business case contractors present to TfL, and Brent Council must play a central role in making business cases for Brent bus routes as strong and robust as possible.
- **Prepare a plan to actively lobby for better public transport access for Brent for when the Chiltern franchise comes up for renewal in December 2021**, working to bring together Transport for London, local businesses, community groups and others together in a campaign for better railway transport access to the borough. For example, the strategy should include lobbying for a more regular service to Sudbury and Harrow Road station as part of the Chiltern franchise.
- **Lobby strongly to improve the affordability of public transport in the borough**, seeking to secure special dispensation from TfL to be part of a cheaper ticketing zone, along the same lines as Stratford, and inserting this as an objective in Local Implementation Plan 3.
- **Set out clear proposals for a Willesden-Wembley Cycle Superhighway**, and fully consult with local residents on how this project should be delivered. As noted in Recommendation 2, the Council should explore extending the superhighway to Wembley Park to increase cycle usage on event days.
- **Work alongside the FA to lobby for improved capacity in stations including Wembley Park, Wembley Stadium and Wembley Central** in order to reduce car usage on event days, as set out in Recommendation 2.

Chapter 6

Housing, planning and the built environment

Brent's current situation

Direct impact

The average individual spends over 90% of their time indoors, which means that good indoor air quality and good air quality in the built environment is vital for public health.¹¹¹ As noted in Chapter 1, whilst road transport contributes half of air pollution in Brent, the other half is caused by a range of factors associated with housing and the built environment.

These are:

- **Heat and power generation**, which is responsible for 35% of CO₂ emissions, 22% of NO₂, 20% of PM_{2.5} and around 8% of PM₁₀ emissions. This is further broken down into:
 - **Domestic heat and power generation**, responsible for 25% of CO₂, 10% of PM_{2.5}, 7% of NO₂ and less than 5% of PM₁₀ emissions
 - **Industrial and commercial heat and power generation**, which is responsible for 10% of CO₂, less than 10% of PM_{2.5}, 15% of NO₂ and 3% of PM₁₀ emissions
- **Industrial and commercial industrial processes**, which is responsible for 35% of CO₂, 20% of PM_{2.5}, 22% of NO₂ and around 8% of PM₁₀ emissions.
- **Industrial and commercial construction**, responsible for 0% of CO₂, 20% of PM_{2.5}, 5% of NO₂ and 41% of PM₁₀ emissions.

Within this, a range of often-overlooked factors make a significant contribution to air pollution, including:

- **Wood burning** and the burning of household waste
- **Commercial cooking**. It is now estimated that commercial cooking produces 13% of London's particle pollution,¹¹² especially in areas with high concentrations of restaurants
- **Household heating and cooking**, which can release particulate matter, carbon monoxide, nitrogen oxide and sulphur dioxides¹¹³
- **Damp** in the household¹¹⁴
- **Chemicals used for cleaning or decoration** in our homes¹¹⁵
- **Asbestos** in homes¹¹⁶
- **Building construction** and demolition¹¹⁷
- **Heavy duty non-road mobile machinery (NRRM)** used whilst constructing buildings. For example, excavators contribute 46% of the NO_x of NRRM in London, followed by dumpers (11%) and forklifts (7%)¹¹⁸

Indirect impact

In addition, housing, industrial processes and the built environment can also have a significant indirect effect on air pollution. Poorly-planned developments can make it harder to take lower-emission forms of travel or plan public transport routes. This can also be the case for poorly-situated developments placed in areas with poor public transport accessibility, and without any associated measures to improve access to public transport as part of the development process (or force developers to contribute to this).

Along the same lines, there is also some debate over the contribution that green spaces can make to addressing air quality and (conversely) the role that *a lack* of green space in many areas of Brent plays in air pollution issues in the area. The scrutiny inquiry received a range of written representations from Brent residents during the process of this inquiry, and a considerable number of these specifically raised questions about the part that green space could play in improving the quality of our air. These residents also rightly highlighted that many air quality hotspots in the borough also suffer from a considerable lack of green space – a claim we do not contest, and one which we agree needs to be addressed.

When we met with Dr Ian Mudway of King's College London's Environmental Research Group, we specifically asked him what role green space should play in tackling poor air quality, and whether it has any direct or indirect benefit on air quality.¹¹⁹ He strongly agreed that green space has a crucial *indirect* role to play in improving air quality, most especially by making pedestrian and cyclist routes more attractive and safer and thus encouraging a modal shift. It can also play a crucial role in reducing levels of CO₂ and therefore addressing the greenhouse gas effect. Although not related to NO_x and PM specifically, he also stressed the strong evidence on the wider benefits of green space, including in health and enhancing biodiversity. Efforts to encourage green space therefore need to be strongly encouraged, and many areas affected by poor air quality will require intensive and targeted provision of further green space.

However, he strongly advised against Councils promoting green space as a *direct* solution to poor air quality: it cannot, in and of itself, improve the quality of our air, and Councils' efforts to improve air quality must centre on addressing the *underlying causes* of poor air quality. Some of the things being planted as part of 'greening' initiatives in other areas of London are also highly allergenic, and risk making it harder for people with hayfever and other issues from going out and about. The scrutiny inquiry also felt that greening can potentially offer Councils a route to be 'let off the hook', letting them promote superficial 'solutions' to poor air quality rather than taking measures to address the things which cause PM and NO_x emissions in the first place. We will this theme later in this chapter, where we will identify recommendations as to how Brent Council can best address air quality issues through the provision of green space.

Existing commitments by Council and GLA

To at least some extent, addressing the issues above requires some action at a national level, such as changes to building and construction regulations and improvements in heating standards. However, concerted action can still be taken at a local and regional level, and a number of steps are currently being taken and considered by the Greater London Authority and Brent Council.

At a regional level, the London Plan, which determines planning policy across all London Planning Authorities, sets out a range of requirements on developers for air quality. This plan has been updated in July 2019 and a draft version is now being consulted on. Proposed requirements in the new draft London Plan include:¹²⁰

- Development proposals must not: (Policy SI1, B1):
 - (a) lead to further deterioration in existing air quality
 - (b) create any new areas that exceed air quality limits or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits
 - (c) create unacceptable risk of high levels of exposure to poor air quality
- In order to meet the requirements set out above, development proposals must (Policy SI1, B2):
 - (a) Be at least air quality neutral
 - (b) Use design solutions to prevent or minimise increased exposure to existing air pollution and make provision to address local problems of air quality
 - (c) Major development proposals must be submitted with an Air Quality Assessment, which sets out how it meets the requirements of policy SI1, B1
 - (d) Development proposals in air quality focus areas or that are likely to be used by large numbers of people vulnerable to poor air quality ... which do not demonstrate that design measures have been used to minimise exposure should be refused
- There are also separate sets of guidance on the control of dust and emissions from construction and demolition activities in London. A range of measures are being taken by several Councils, in collaboration, to address issues related to air quality from the construction process, and to force construction companies to take a more responsible approach.¹²¹
- In order to support Councils in making air quality neutral assessments, the Air Quality Neutral Planning Support document was published in March 2013 and updated in April 2014. It provides specialist consultants with a methodology to undertake an 'air quality neutral' assessment, as well as emission benchmarks for buildings and transport, against which the predicted values for the proposed development can be compared.¹²²

We asked the Council whether any major developments in Brent failed to meet the air quality neutral requirement. We were advised that "no major development in Brent has failed to meet the air quality neutral requirement due to the fact that the environmental health team that scrutinises air quality neutral assessments will work with developers until air quality neutrality is achieved on each development proposal." However, currently minor developments are not legally required to be air quality neutral due to what is perceived to be their insignificant impact on local air quality, and small developers are not required to make an air quality neutral assessment. We queried this issue with small developers, and were advised that addressing the air quality impact of small developments would require changes to planning policy at a national level.¹²³

At a local level, Brent is already giving effect to these policies and striving to improve the air quality of housing and the built environment in a number of ways:

- Our Planning Department and Planning Committee give effect to the ‘air quality neutral’ and other requirements in the London Plan and other documents. Our air quality action plan has a target to increase the percentage of developments which are air quality neutral or better.¹²⁴ Based on the evidence received (see above), we understand all large developments meet the air quality neutral requirement.
- Brent Council’s Local Plan, which will determine how Brent’s planning policy reflects the London Plan, is currently in draft form and is in the process of being consulted on. It commits to continuing to combat air pollution through greening initiatives; working in partnership with other Local Authorities to combat air pollution; and reducing air pollution from vehicles through the promotion of active travel.¹²⁵
- Brent is part of the Low Emission Construction Partnership, which is working to implement tough emission standards on NRRM and in the construction process for buildings. We require construction dust to be managed and require NRRM to meet certain standards for developments taking place in the borough.¹²⁶
- The Council is responsible for the regulation of small, less complex industrial processes which have the potential to cause air pollution (larger industrial processes are regulated by the Environment Agency). We operate a permit process for these industrial sites and are responsible for setting environmental standards for them. Complaints about any sites can be made directly to Brent Council.¹²⁷
- Our air quality action plan has a commitment to creating a register of combined heat and power plants in the borough, ensuring all new major developments install low emission boilers as a minimum requirement and reducing the estimated level of emissions caused by these processes locally. It also commits to improving energy efficiency in council buildings, and achieving a percentage emissions reduction through energy conservation measures.¹²⁸
- The planned South Kilburn regeneration scheme promises to have a positive effect on air quality through the provision of an efficient communal heating system for tenants. However because of restrictions under UK legislation, Councils are prevented from tapping into the full air quality benefits of communal heating systems because private households are unable to buy-in to these systems – something which could be addressed through changes to national legislation.¹²⁹
- Finally, the air quality action plan is committed to a targeted upgrade of green infrastructure across the borough to indirectly mitigate against the impact of poor air quality. It has committed to undertaking an audit to identify areas where upgrades to green infrastructure are required and publishing a programme of upgrades.¹³⁰

Scrutiny of existing measures and scope for further action

The Scrutiny Inquiry broadly welcomes these commitments, as well as the positive direction of travel set at both a Council and GLA level. However, based on our engagement with other

stakeholders and our review of the wider literature, we feel there is scope for further action in a number of areas:

- **Brent Council's air quality strategy currently lacks commitments to address the air quality impact of commercial cooking processes, particularly in town centres.** Camden's air quality strategy has specifically identified this as a key issue in dense town centres in their borough and a key cause of poor air quality.¹³¹ The Trade Union Clean Air Network has also highlighted this as a key and often-overlooked occupational health risk.¹³² The Council should explore what steps it could take locally to address these issues, including by:

 - Working to audit the level of air pollution caused by commercial cooking in certain hotspots within Brent, and using this to inform target areas identified in the Council's air quality strategy
 - Ensuring town centre strategies, and town centre managers, proactively seek to address these issues and engage with local businesses about problems
 - Engaging with businesses to spread best practice and work jointly to devise solutions, through the proposed Green Brent Partnership
 - Working in partnership with trade unions to address the occupational health risks caused by commercial cooking processes
 - Where we can't effect change locally, lobbying for change and better standards at a national level
- **The Council should consider further steps to improve the heating standards in the housing sector.** We welcome the existing commitments in the air quality action plan to improve heating standards in our housing stock and push for better standards in new developments. The Council itself is leading by example here with the South Kilburn development. But further steps could be taken:

 - We suggest the Council undertake a feasibility study into the role that private rented sector engagement, including through the licensing system, could play in improving heating standards in Brent's PRS properties
 - The Council should set specific targets and timescales for improving the heating standards of our own housing stock, building on the commitment already made in its air quality action plan
 - In line with steps taken in Croydon Council, the Council's should explore the merits of investing the proceeds of its Carbon Offset Fund into measures to address the air quality of heating across the housing sector and in small businesses¹³³
- **A wider lobbying and public awareness campaign could be undertaken to raise awareness about the impact of wood burning and other household activities.** Whilst the Council's air quality action plan already commits to some measures to address the burning of waste, further steps could be taken:

 - A seasonal public awareness campaign could be undertaken to highlight the damage caused by wood burning (we expand on the need for a public awareness campaign in chapter 8 of this report)



- Where it is not possible to take effective enforcement action due to loopholes in current legislation, the Council should actively lobby national Government for better standards so we can take action more easily
- **The Council's efforts to address air quality through green spaces should be evidence-based, and focused for example on how greening can reduce vehicle usage by making active travel more attractive.** The scrutiny inquiry is strongly in favour of the provision of more green space throughout the borough, and also feels that a great deal of this should be provided in air quality hotspots. The borough should enhance its greening initiatives for a whole host of reasons – not least because of the considerable benefits it can bring to mental health and biodiversity, and the role it can play in addressing global heating.

However, the Council should not promote greening as the sole solution to issues of poor air quality, and it should not use it as an excuse for avoiding to tackle the underlying causes of air pollution. Rather, greening should be promoted for a while host of broader reasons, and because of the indirect benefit it can bring in encouraging modal shift. Where residents approach the Council to ask for air quality through greening, the Council should introduce greening as part of a wider package of measures to address the root causes of the air pollution on residents' streets.

Recommendations

In light of the above, this scrutiny inquiry **RECOMMENDS**:

RECOMMENDATION 7

THAT THE COUNCIL EXPAND THE NUMER OF INITIATIVES FOR DEALING WITH THE AIR QUALITY IMPACT OF HOUSING AND THE BUILT ENVIRONMENT, AND ENGAGE CLOSELY WITH EXPERTS TO CONSIDER FURTHER STEPS AS NEW EVIDENCE AND TECHNOLOGY EMERGES.

We recommend that the Council consider taking action in the following additional areas:

- **Consider using proceeds from the Council's forthcoming Carbon Offset Fund to invest in initiatives to reduce the air quality impact of heating in homes and businesses,** along the same lines as steps taken by carbon offset funds in other Councils, such as the Croydon Healthy Homes Scheme.
- **Address the air quality impact of commercial cooking, particularly in town centres.** Other councils' air quality strategies have identified this as a key issue. It is also a key occupational health hazard, and offers an opportunity for greater engagement and partnership with trade unions. Brent's air quality action plan should set out steps which could be taken here, and the Green Brent Partnership (see recommendation 3) should be empowered to work with businesses in town centres to address these issues.
- **We should consider further steps to improve heating standards in private rented housing and Registered Providers.** The Housing Department should consider whether more stringent PRS licensing standards could help drive up standards in the sector, and it should also actively engage with Registered Providers to ensure that the air quality standards of their own housing stock are improved in line with ours. The Council should also set a clear timeline for the delivery of improvements of air quality standards in our housing stock.



- **There should be a public awareness and lobbying campaign to address issues with the air quality impact of wood burning and waste burning.** A seasonal campaign against wood burning could help highlight the severe impact this causes. Where Brent Council is prevented from taking enforcement action due to restrictions in national legislation then, as set out in recommendation 1, we should lobby for more stringent laws.

Because the evidence on the air quality impact of these factors (and the best ways to address them at a local level) is still in the process of being developed, we recommend that the Council closely engage with experts on this and stay regularly updated on the evidence. Where new technology is able to reduce the air quality impact of heating and cooking processes, the Council should work through the Green Brent Partnership to actively encourage greater use of this by businesses and developers.

RECOMMENDATION 8

THAT THE COUNCIL CONTINUE TO PROMOTE GREEN SPACE AS A WAY OF SUPPORTING ACTIVE TRAVEL, AND BECAUSE OF ITS WIDER BENEFITS TO HEALTH, THE CLIMATE AND BIODIVERSITY, BUT ENSURE THAT MEASURES TO IMPROVE GREENING ARE NOT PROMOTED AS AN ALTERNATIVE TO DEALING WITH THE UNDERLYING CAUSES OF POOR AIR QUALITY.

The scrutiny inquiry is extremely supportive of the greater use of green space for a whole host of reasons, not least the measurable impact it has on mental health and wellbeing and its potential to reduce CO2 levels. However, the evidence we have received from experts has been clear that the provision of green space is not effective in improving air quality. The only effective way of addressing poor air quality is to address the underlying causes of it, and it would be greatly misleading to promote green space as a way of mitigating these problems.

Green space does, however, have a significant indirect benefit on air quality, as it can make areas more attractive for pedestrians and cyclists. In some road schemes it can also be used as an attractive way of slowing traffic down and thus promoting active travel and addressing concerns about safety. In many cases, areas in greatest need of green space are also areas of poor air quality, and therefore clearly require significant investment in green space for a whole host of reasons.

The scrutiny inquiry therefore recommends that the Council take an evidence-based approach to the promotion of green space in its air quality strategy. The Council should promote the use of green space as a way of helping to change behaviour and encourage modal shift, and should invest in greater provision of green space across the borough (including in air quality hotspots), but it should not risk creating the misleading impression that more green space could ever tackle the underlying causes of air quality on its own.

This should not, however, detract from the fact that the Council needs to considerably expand the amount of green space and trees available in Brent, for a whole host of wider reasons. We therefore encourage the Council to expand the availability of green space across the borough, and ensure there is no net reduction in green space or net loss of trees as a result of any of the Council's developments and initiatives, including the footways improvements programme.



Chapter 7

Schools, children and young people

Brent's Current situation

There is strong evidence that children are particularly vulnerable to air pollution because of their size relative to sources of air pollution, and because their lungs are still in development. High levels of exposure in childhood will considerably affect their future health and wellbeing – shortening lives, causing health problems such as asthma and, in a number of deeply tragic causes, causing their deaths.¹³⁴

Exposure in and around primary schools and nurseries makes a significant contribution to this health problem. Across London as a whole, over 450 schools are in areas with dangerously high air pollution levels.¹³⁵ There are also issues with indoor air quality in schools, and a 2018 report commissioned by the GLA found wide variations in interior air quality between schools.¹³⁶

Within Brent, the GLA has commissioned air quality audits from two of Brent's primary schools, both of which exceed legal limits for air pollution. However it should not be assumed from these audits that these are the only schools in Brent which exceed legal limits (they are not), or that they are necessarily the worst schools in the borough.

Both these audits identified that whilst much more can and should be done to reduce the air quality impact of school and teacher travelling, this was not the sole cause of air pollution in either school:

- **John Keble Primary School.** The report identified that 11,500 vehicles per day travel within a 200-metre radius of the school, which puts it within the top 25% of schools assessed in the audit in terms of traffic volume. By contrast, there are 450 pupils in the school, of whom 18% went to school by car at the time the audit was carried out.¹³⁷
- **Ark Franklin Primary Academy.** Similarly, the report observed that approximately 10,500 vehicles a day travel within a 200-metre radius of the school along core roads around it. This is also within the top 25% in terms of traffic volume of the 50 schools assessed as part of the programme. To put these figures into context, there are just 650 pupils in the school, of whom 26% travelled by car at the time the audit was carried out.¹³⁸

Addressing these issues, and improving the air our children and young people breathe, therefore requires a mix of measures. They should not be solely focussed on changing travel behaviour of parents and teachers, important as this is, but instead grounded in a wider set of measures to improve air quality in the wider environment around schools themselves. This requires the Council to work in partnership with schools in Brent, working with them to identify what steps the Council needs to take to improve air quality in and around local schools.

The trajectory of change in Brent is positive, with modelling suggesting that all Brent's schools will be brought within legal limits of NO_x as a result of the Ultra-Low Emission Zone (see Figure 14),



although this of course says nothing of the PM created around schools, for which there is no 'safe' limit.¹³⁹

However, best practice needs to be spread more widely, and further steps need to be taken to accelerate the pace of change. The fight against poor air quality for children also needs to be broadened to encompass nurseries, secondary schools, colleges, sixth forms and universities, and to involve children and young people more widely in measures to address air quality and in the creation and delivery of public health messages about the dangers of our poor air. We return to these issues later on in this chapter.

Existing commitments by Council and GLA

Air quality in schools is rightly recognised as a key issue both in the borough and across London, and both Brent Council and the Greater London Authority have already committed to take action in this area in the following ways:

- **Auditing air quality in some of the worst-affected primary schools and nurseries, and investing funds to address air quality issues in these schools.** This initiative has been spearheaded by the GLA and has helped inform local measures to improve air quality in a number of Brent schools.
- **Piloting School Streets in Harlesden Primary School and Wykeham Primary School**, on Minet Avenue and Annesley Close. Under this initiative, residents on these streets can still drive down their road as usual, but other motorists who drive down them during peak times during term time will be caught on camera and face a fine.¹⁴⁰ This pilot started in June 2019 and is set to last at least 18 months. An interim review of its progress will take place in December 2019, with a final decision made on the continuation of the programme after the full 18 months. The scrutiny inquiry has been encouraged by what we have heard thus far by the progress of these pilots.
- **Encouraging schools to join Transport for London's Safer Travel: Active, Responsible, Safe (STARS) accreditation programme to promote active travel.** Under the STARS programme, schools are able to sign up with TfL to explore what other schools are doing around active travel, implement their own active travel measures and then showcase and promote their success. It is an initiative designed to spread and promote best practice across London's schools.

After being signed up, schools are accredited according to three different standards (Bronze, silver or gold). Brent Council's air quality action plan already has a target to ensure all schools have active travel plans, and support schools to attain STARS accreditation or maintain existing STARS accreditation. Table 5 in the Appendix, provided at the scrutiny inquiry's request by Brent Council, illustrates the current accreditation standards of each of Brent's 97 schools. It shows that:

- **55 of 97** schools in Brent (56%) do not yet have STARS accreditation
- **7 of 97** schools (7%) have bronze STARS accreditation
- **5 of 97** schools (5%) have silver STARS accreditation

- **30 of 97** schools (31%) have gold STARS accreditation

Brent Council's air quality action plan is committed to ensuring 100% of Brent schools have an active travel plan, and 40% of schools with an existing travel plan achieve a higher level of compliance. There are currently 50 schools and 20 nurseries with an active travel plan in Brent (see Table 5 in Appendix C for a full list of schools with active travel plans, cross-referenced with the above STARS data).¹⁴¹

- **Holding at least 8 anti-idling events in schools.** Finally, Brent Council is committed to getting all schools to participate in the Breathe Clean project. They are also committed to improving the provision of guidance for reporting issues and strengthening measures for enforcement of anti-idling regulations.

Scrutiny of existing commitments and scope for further action

As part of its investigations the scrutiny inquiry held a site visit to Ark Franklin Primary Academy and met with the National Education Union, and received evidence from a number of people in the public about childrens' exposure to air quality and local schools' policies. We also carried out a broader review of other councils' policies on school air quality, in order to understand whether there were any areas of best practice which the Council should draw from.

Based on these discussions, we would particularly highlight that there is scope for Brent Council to build on its policies in the following areas:

- **The best way to encourage wider take-up of school initiatives is for the Council to take leadership alongside schools, encouraging a broad range of schools to act in unison.** It can sometimes be challenging being the first school to take action on air quality locally. Schools which take the initiative on air quality can, when acting in isolation, run the risk of being mischaracterised as being 'the worst' school locally for air quality – a concern which the scrutiny inquiry heard from a number of parents who approached us.

This fear can often make it harder for individual schools to come forward to take action. The Council can help address this is if it takes a leadership role, encouraging all schools to act in unison rather than in isolation, and by actively challenging negative perceptions about the schools which are taking the initiative. We suggest that the Council support this by equipping Councillors to act as clean air champions for local schools in their wards, and (so far as is possible) equipping them with the information needed to engage with their local schools on the issue and support their schools in taking action.

- **The successful school streets pilots should be enhanced and built upon, drawing from best practice in other Councils, with a presumption in favour of school streets.** The scrutiny inquiry was particularly interested in the steps Haringey Council is considering in this area, where their Local Implementation Plan has committed to implementing at least 12 more school streets by 2022, in order to address concerns about non-resident parking during school hours across the Local Authority.¹⁴² The Council will then actively engage with all schools in the borough on the issue, and work to implement these schemes where they have the support of local residents.

A similar initiative needs to be spearheaded by Brent Council, in order to expand the benefits of the successful school streets pilots to other areas of the borough. This would also have the added advantage of persuading a broader range of schools to take action on air quality, where they have not done so already, through the use of school travel measures, by reassuring them that the Council will play its full part in addressing the wider causes of poor air quality around schools, which are outside of their control.

- **The Council needs to devise a specific strategy to address air quality in schools where school streets will not address the issues sufficiently.** A number of Brent schools are situated along main roads, where school streets may not be possible. In others, school playgrounds are located near main roads, potentially heightening childrens' exposure to poor air quality.

The scrutiny inquiry feels that even in these instances, the preference should always be to implement school streets where possible. Where this is not possible, whether due to restrictions on Transport for London roads or otherwise, a specific set of measures needs to be taken to address the problem and devise bespoke solutions. Based on our engagement with Ark Franklin Primary, the National Education Union and others, we feel that measures could include:

- The erecting of 'green barriers' in school playgrounds which are exposed to air pollution where evidence suggests that they could be effective in protecting children from poor-quality air, as a potential mitigating interim measure. This should not, however, be used as an excuse not to tackle the underlying causes of poor air quality in these schools. Evidence shows that whilst green screens can block some polluted air from school playgrounds, they have not been sufficient, on their own, to bring NOx pollution into legal levels in schools studied¹⁴³
 - Ensuring school entrances / exits do not lead off into heavily-polluting main roads, in line with successful steps taken by Ark Franklin
 - Working with Transport for London, local businesses and others to address the causes of poor air quality along main roads and playgrounds
- **Strategies to address air pollution in schools need to deal with the wider underlying causes of air pollution in and around schools, as well as measures to encourage active travel by parents and teachers. The Council has a central role to play in this area.** As the air quality audits in John Keble and Ark Franklin primary schools show, whilst initiatives to encourage parents, teachers and children to walk and cycle to school are essential, this is not the key cause of air pollution in either of these areas. Instead, air pollution caused by the wider surrounding area, such as commuter traffic and public transport, is the central cause of air pollution in these schools.

Parents and teachers absolutely must play their part in addressing the problem, but this must come part of a wider set of initiatives. Brent Council's initiatives must recognise this. The promotion of active travel and STARS accreditation alone in Brent schools in areas with poor air quality will not, in and of itself, be sufficient to address issues: the Council's

approach must recognise that school streets and other initiatives to address non-resident travel must run alongside them.

- **The Council should continue to work with schools to improve air quality through greener school travel arrangement, but it must also work to address some of the wider, structural factors which can prevent greater use of active travel by parents and teachers.** We feel the Council should set a target for all schools in Brent to be 'gold' STARS accredited and to have active travel plans in place, and it must play a leading role in strongly promoting active travel and spreading best practice across the borough.

However, as part of this, the Council must also engage with education unions about how it can support them in addressing some of the underlying causes of low take-up of active travel, particularly for teachers. These can include:¹⁴⁴

- Low teacher pay, which is increasingly forcing teachers to live outside of London in places with limited access to public transport
- No provision for key worker housing for teachers and other public sector workers
- Catchment areas for some schools, especially secondary schools, which tend to draw from a larger catchment area
- Changes in school admissions policies, particularly academies, which can see students being drawn from increasingly wider catchment areas without easy access to public transport or active travel
- A chaotic, low-paid and difficult jobs environment for some parents, who may have employers which do not offer flexible working arrangements for school travel

Some of these steps may be impossible for the Council to address on its own, and where it is unable to effect change itself it should lobby national Government for the change required. Others could potentially be addressed by the Council, for example by considering teacher key worker housing as part of the Council's commitment to provide key worker housing in the borough.

- **The Council should consider further steps to promote better enforcement of idling, traffic and parking issues around schools.** A number of people we have engaged with as part of this inquiry have highlighted that there are issues with the enforcement of idling, parking and traffic issues around a number of Brent's schools, with traffic officers not always being as effective in enforcing it as they should be. Anti-idling signs should also be more prominent and clearer around schools.

Addressing this partly requires better enforcement by traffic officers, but it can also be achieved by equipping a broader range of stakeholders to take action against idling and traffic issues, and the use of a wider public health campaign – something which is partly addressed by other recommendations in this report (see Recommendation 2 and 10). If delivered alongside measures to improve enforcement by council officers, this would help address the root causes of poor behaviour around schools by making the practice socially unacceptable.

- **More could be done to provide more detailed audits of the extent of active travel in our schools, potentially drawing from external funding.** We are aware of steps being taken by Ark Franklin and others to audit how pupils get to school and assess the distance they live from schools. Anecdotally, we have been advised that the parents who drive to schools are not always the ones who live furthest away, suggesting there is not necessarily a clear correlation between distance travelled and use of active travel.

Ideally, local schools and Brent Council should work together to undertake a comprehensive audit of school travel methods, to inform the development of active travel schemes and work out what further steps the Council needs to take to support active travel. This would help take considerable pressure away from schools, which are having to audit travel arrangements in addition to their many other responsibilities. The scrutiny inquiry suggests the funding for this could be sought from an external source which may be willing to support the scheme, perhaps drawing from a company's corporate social responsibility fund.

- **Children and young people could play their part in wider awareness-raising initiatives, and the Council could play a greater role in actively informing young people about air quality and equipping them to raise awareness.** The scrutiny inquiry feels that there is untapped potential in helping children and young people to play a more central role in raising public awareness of air quality, and supporting them in actively lobbying for changes – both locally and nationally.

Existing forums, such as the Brent Youth Parliament, should be supported with educational materials and information to highlight key air quality issues in the borough and equip them to effect change. The Council should also consider innovative uses of Community Infrastructure Levy and Love Where You Live funds to support young people-led initiatives to raise awareness of air quality issues – a theme which we return to in Chapter 8.

- **The Council should work in partnership with schools, teachers' unions, school councils and the Brent Youth Parliament in raising awareness about poor air quality in our schools.** Building on the above, in the past, Brent Council has taken a leading role in convening local conferences with schools to discuss how they could work together to address key issues of shared concern.

The climate emergency and air pollution crisis surely offer a further opportunity to convene such a conference. Such a conference should seek full participation from Brent's schools, including academies and free schools, and seek to involve school councils, school leadership and trade union representatives alongside Council officers who can offer expertise on air quality in Brent schools.

Recommendations

In light of the above, this scrutiny inquiry **RECOMMENDS**:

RECOMMENDATION 9

THAT THE COUNCIL CONTINUE TO PROMOTE MEASURES TO IMPROVE AIR QUALITY IN OUR SCHOOLS, AND WHERE POSSIBLE ENHANCE AND EXPAND ON EXISTING INITIATIVES. IT SHOULD WORK IN PARTNERSHIP WITH SCHOOLS AND STUDENTS TO AGREE A SHARED APPROACH TO IMPROVING AIR QUALITY IN THE BOROUGH.

The scrutiny inquiry is fully supportive of the measures Brent Council has already taken in this area, and particularly welcomes the school street pilots which are currently being implemented. We also agree with the objective to pursue STARS accreditation for all schools, and support the ongoing audits of air quality in our schools and nurseries.

But in order to encourage more schools to participate, it is important Brent Council builds on this success, and plays a leading role in the borough in promoting air quality in our schools. This will help protect and support those schools which have taken leadership locally, giving head teachers, parents and students the support they need.

We therefore recommend that the Council:

- **Work with schools to identify how it can address air quality issues around schools.** Schools which lead the way in improving air quality can only go so far, and the Council must play its part in addressing air quality around schools, most especially from non-residents. When we engage with schools we need to ensure that a multi-disciplinary team of Council officers, from the highways team and otherwise, also engage with schools and actively discuss what steps we could take to support them.
- **Expand the school streets initiative, and consider a presumption in favour of school streets where there is support from local residents.** This will help deliver improvements across the board in Brent, and help better-support those schools which have been at the vanguard of improving air quality in their areas.
- **Set out a specific strategy to improve air quality in schools near main roads,** where school streets cannot be introduced. This could include changing the location of entrances to students so they do not have to walk to school on main roads, and considering the use of Low Emission Neighbourhoods and better traffic management to address the poor air quality impact of main roads. The Council must also ensure that air pollution levels in any new schools built in the borough are within legal limits, and that a clear strategy is always in place to ensure this.
- **Work with schools to undertake an annual survey of school travel methods.** This survey should particularly look at the distance from homes, as the scrutiny inquiry has received evidence suggesting that because of the small size of many primary school catchment areas many car journeys are in fact shorter distances than might be assumed. A 'league table' of schools based on use of active travel should be created. We feel the provision of this survey could be funded using funding from an external source within Brent, such as a developer in Wembley.
- **Take a zero-tolerance approach to parking on yellow lines around schools and/or vehicle idling around schools,** and strive for better enforcement of these standards during and outside of the school run. Whilst we acknowledge that stronger enforcement measures are not always possible due to the restrictions of the Protection of Freedoms Act 2012, the Council should strive to be innovative in the approaches it takes to enforcement.

- **Build on the commitment for active travel plans and TfL Safer Travel: Active Responsible, Safe (STARS) accreditation, further engaging with Brent schools to deliver active travel plans and STARS accreditation.** Schools which are not taking part in the STARS initiative and/or which have yet to develop active travel plans need to be publicly identified and supported to become accredited, and we should set a target for all schools to achieve 'gold' STARS accreditation by a set date.
- **Work with schools to insert some commitments to active travel in home/school agreements,** so that clear commitments and a shared understanding is made between parents and schools around school travel methods, where there are no mitigating circumstances.
- **Involve schools, children and young people in the delivery of broader public health messages on air quality, and support schools to provide educational materials on air quality.** The scrutiny inquiry feels there is considerable untapped potential in involving young people in public awareness campaigns around air quality, and making innovative use of CIL and LWYL funds to help them deliver hard-hitting messages about the impact it is having. This will also support their education and help equip teachers to raise awareness about the impact of air quality. We expand on this suggestion in Chapter 8 of this report.
- **Prevent children being exposed to air pollution from ice cream vans.** This is a hugely emotive issue and the scrutiny inquiry received a number of representations from parents about this problem, as they were rightly concerned about their childrens' exposure to poor air quality from idling ice cream vans. Following the approach taken by Camden Council, Brent Council should look to implement restrictions on the locations of ice cream vans, and set out a strategy – working with manufacturers of vans – to bring exhaust emissions of all ice cream vans down to zero.
- **Devise a strategy to address air quality and improve active travel in nurseries, secondary schools, colleges, sixth forms and universities,** where many of the principles set out in primary school engagement will need to be applied in future. For secondary schools, colleges, sixth forms and universities, there should be a presumption in favour of active travel for all students, and educational institutions should be actively discouraged from introducing all but the most essential parking provision.
- **Convene an air quality and climate emergency summit with all schools in Brent,** inviting school councils, school management and teachers' unions to agree a shared approach to improving air quality in the borough. This summit could act as a catalyst for more shared action in this area, and help provide students in schools with important educational resources to help them understand issues with air quality and how they might work to address them.

Chapter 8

Engagement, awareness-raising and public health

Brent's current situation

As noted earlier, poor air quality is the greatest environmental risk to ill health in the UK, and the fourth-greatest threat to public health after cancer, heart disease and obesity.¹⁴⁵ Yet despite its significance, it is given disproportionately less priority in national public health messaging, and throughout the course of our investigations, this inquiry has been surprised by how little air quality is prioritised in public health initiatives, both nationally and locally.

For example, when the pollen count is high, warning messages are usually very prominent in national weather forecasts and attract a great deal of public health and media attention. By contrast, whilst Public Health England¹⁴⁶ and the King's College London Environmental Research Group¹⁴⁷ publish similar warnings whenever air quality is poor, these messages tend not to filter through or attract nearly as much prominence.

Furthermore, there are range of useful apps which can help inform people about air quality issues – such as AirText (which provides people an automated text whenever local air quality is poor)¹⁴⁸ or WalkIt (which tells users the safest route to walk between two destinations, in a way which minimises air pollution) – but whilst these apps are promoted on the Brent Council website¹⁴⁹ and on the London Air Quality Network website,¹⁵⁰ it again does not appear that they are being utilised on the frontline to support particularly vulnerable groups.

When considering why this is the case, the scrutiny inquiry felt that there are a number of factors, some of which are relatively unique to air pollution as an issue, which can make it particularly difficult to change individual behaviour on air quality through awareness-raising and public health initiatives. Most notably:

- Unlike other public health messages, such as the need to exercise or eat healthily, improving air quality does not have the same *direct* public health benefit to the individual taking the action. Improving air quality has undoubted health benefits across the whole population, but the individual we are asking to change their behaviour is only indirectly benefitting – not in the same direct way that an individual being asked to eat healthily will enjoy very clear and direct benefits from changing their behaviour. This can make it hard to persuade people that it is in their own personal interests to take action on air quality.
- Many of the terms to describe the level of air pollution are complicated, and extremely hard for the general public to understand. Terms like PM2.5, PM10 and NO2 are hard to relate to or understand in intelligible terms. Put simply, there is no 'air quality equivalent' of the '5-a-day.'

- The air pollutants of today are generally invisible to the naked eye – a stark contrast to the ‘great smogs’ of the 1950s, which led to the last Clean Air Act in the UK and saw significant improvements in air quality in the capital. It can be hard for the layperson to understand that invisible particulates –the majority of which are created from non-exhaust sources such as cars skidding – can cause so much damage to individual health.
- Finally, and linked with the above, there is a risk of the public misunderstanding how they can protect themselves from poor air quality, or mitigate their effects. There is a belief amongst some that you can ‘hide’ from the effects of air pollution by using a car, when in fact evidence suggests that car drivers are more exposed to ambient air pollution than those who walk or cycle along the same roads.¹⁵¹ This misperception, if not corrected, risks leading to kinds of behaviour that exacerbate worsen air quality for everyone

The scrutiny inquiry feels there is a need for a wider public health campaign on air quality, to raise awareness about the impact it is having and, in the long-term, promote behavioural change. Brent has a number of existing assets in the borough, notably event days and the North Circular, which mean any such messages would likely get a great deal of coverage. This must be matched with a drive in the wider health sector, across the NHS, to promote initiatives to improve air quality. This chapter considers the role that such initiatives could play in improving air quality in the borough.

Existing commitments by Council, GLA and health sector

At present, the measures Brent Council, the public health team and the wider health sector are taking to address issues with poor air quality are relatively limited, as the focus of Council policies in particular has tended to be addressing the underlying causes of air quality rather than raising awareness about the issue.

Nevertheless, what initiatives and commitments there are include:

- The promotion and dissemination of high pollution alert services, such as AirText and WalkIt, by Brent Council
- Publishing guidance on options for low-pollution routes for walking and cycling, alternative travel and other action to be taken on high-pollution days
- Raising awareness about air quality issues through the expansion of current low emission days, such as ‘Play Streets’ and ‘Walk on Wednesdays’, to “include community-based action days”
- Provide guidance to local communities on the most effective local action to reduce exposure to local pollution

Scrutiny of existing commitments and scope for further action

In order to understand more about these issues, the scrutiny inquiry held an evidence session with an expert consultant in public health messaging and behavioural change and ‘nudge’ theory, who offered his services to the inquiry on a pro-bono basis. We also met with Brent Council’s Public Health team and with Transport for London to discuss awareness-raising and public health initiatives.

We approached the North West London collaboration of CCGs for a meeting also, but despite a number of attempts we were deeply disappointed that they did not respond to our request to meet.

Based on these discussions, we suggest that further public awareness campaigns on air quality, as well as wider steps on air quality spearheaded by the health sector, need to take account of the following:

- **Public awareness and behavioural change campaigns need to be framed in intelligible terms, using easy-to-understand and relatable ways of describing the impact of poor air quality.** The scrutiny inquiry considers that the use of public health data on air quality, such as the number of ventilators used as a result of it, could prove particularly useful in informing such campaigns.
- **Campaigns need to focus very specifically on challenging misperceptions about poor air quality (and its causes).** A range of public health messages need to be devised which correct these misperceptions, for example by highlighting that car drivers are more exposed to ambient air pollution than those who use more active forms of travel.
- **They must reach out to, and specifically target, non-residents travelling through the borough.** Transport for London, the Council, the Football Association and others have a responsibility to encourage behaviour change in non-residents travelling through Brent, and raise awareness of the impact of personal car usage on air quality in the borough and promote alternative ways of getting out and about. As part of this, we have discussed with Transport for London the possibility of using public health messages along the North Circular. It is curious that whilst TfL's air quality campaign is prominent in the tube network (users of which have no impact on air quality) it is not being utilised on TfL-operated roads (where users do).
- **Public awareness campaigns need to be positive, and focussed on the individual benefits that different behaviours can bring.** Evidence shows that positively-framed campaigns, focussed on individual self-interest, can be the most effective in changing individual behaviour. As part of this, we would particularly stress the importance of not 'talking down' local areas in any campaign: areas of poor air quality which require targeted action should be framed in positive terms which focus on the action being taken, such as 'Clean Air Zones.'
- **Campaigns must involve the whole community in delivering public health messages.** The scrutiny inquiry would support the innovative use of Community Infrastructure Levy and Love Where You Live grants to support community-driven public awareness and behavioural change campaigns, including from children and young people.
- **The wider health sector must play its part in raising awareness, and must lead by example in the actions it takes to improve air quality.** The local health sector is not currently routinely working with Brent's public health team, or with other stakeholders, to provide intelligible data on the local health impact of air quality. This needs to change.

In addition, the scrutiny inquiry was also impressed by the steps other hospitals in London have taken to demonstrate action on air quality, with a number of trusts across England in declaring a climate emergency. The rest of the health sector needs to follow suit, signing up to initiatives to improve air quality and joining other trusts in declaring a climate emergency.¹⁵²

Recommendations

In light of the above, this scrutiny inquiry **RECOMMENDS**:

RECOMMENDATION 10

THAT THE COUNCIL, WORKING WITH THE HEALTH SECTOR, STATUTORY PARTNERS AND BRENT'S PUBLIC HEALTH TEAM, SPEARHEAD A PUBLIC HEALTH AWARENESS AND BEHAVIOURAL CHANGE CAMPAIGN ABOUT AIR QUALITY. THE LOCAL NHS SHOULD ALSO PLAY ITS FULL PART IN DELIVERING THIS, AND LEAD BY EXAMPLE IN THE MEASURES THEY TAKE TO IMPROVE AIR QUALITY.

This public awareness and behavioural change campaign must be delivered according to the principles set out earlier in chapter 8. It must particularly focus on using all existing assets and opportunities available to deliver public health messages, and thinking about all the potential opportunities to get messages out to people. We believe there is scope for the funding of this to be leveraged from external sources, both in-cash and in-kind.

We recommend that the strategy:

- **Broaden the fight against engine idling, by working to ensure a broader range of enforcement officers and members of the public are able to deliver these messages to drivers.** For example, all FA staff at Wembley event days should be trained and equipped to challenge those caught idling vehicles and volunteers should be used at times of heavy traffic to deliver public health messages on idling to vehicles, as they have been successfully in parts of central London.
- **A creative approach should be taken to delivering public health messages on a wide range of assets, both Council-owned and non-Council-owned.** For example anti-idling messages should also be widely displayed on event days, including on the vests of FA staff and in FA display screens. The Brent Magazine and Brent Council website should also be used to full effect.
- **Particularly focus on delivering messages to non-residents travelling through the borough,** such as on the North Circular and on Wembley event days. We should work with Transport for London to deliver messages about air quality impact directly to those who are having the greatest effect in the borough.
- **Challenge misperceptions and myths about air quality,** making it clear that car drivers are more exposed to ambient air pollution than pedestrians and cyclists and highlighting that the way you drive can significantly affect air pollution.
- **Involve the whole community in delivering public health messages,** considering innovative use of CIL and LWYL funds to promote messages about air quality. The whole community

should also be involved in initiatives to tackle engine idling in times of heavy traffic, delivering public health messages to drivers to turn off their engines.

- **Focus on the positive impact that improving air quality can bring, and appeal to people's self-interests.** Air quality hotspots, which are the focus of Council action on air quality, should be framed in positive rather than negative terms – highlighting the positive action that is being taken.
- **It must use intelligible, easy-to-understand public health data about the impact of air quality.** Ideally, the campaign should be informed by clear, local public health data on the impact of poor air quality – such as ventilator usage.
- **It should promote the wider use of apps and other monitoring devices, including AirText,** so people who are particularly vulnerable to unclean air know when air quality levels outside are at unsafe levels.
- **It must include a seasonal campaign to raise awareness about the impact of wood and waste burning,** especially during the winter months, and highlight the enforcement action which can be taken to those found in breach of air quality standards.

As part of this campaign, the health sector locally must itself lead by example. We recommend that:

- **The local health service quantifies the impact of poor air quality on health,** so the Council can use this to inform public health messages. The success of these messages, and of the wider air quality strategy, should partly be measured based on whether Brent sees a reduction in the health impact of poor air quality.
- **The local NHS, in collaboration with the Council, actively lobby TfL for better public transport provision to hospitals and general practices,** in order to reduce the air quality impact of hospital journeys and better-support the most vulnerable residents.
- **Trusts across the North West London Collaboration of CCGs declare a climate emergency and commit to taking measures to improve air quality,** along the lines taken by trusts in other parts of the UK

Chapter 9

Summary of recommendations

Conclusion

In order to address the issues outlined in this report, and particularly in light of the recent declaration of a climate emergency in Brent, the scrutiny inquiry is calling on Brent Council to spearhead a step change in how we address air pollution in the borough. In the previous chapters of this report, we have set out ten detailed recommendations outlining how the Council needs to achieve this, building on the positive steps which it has already taken to improve air quality throughout Brent. This chapter simply brings together all of these recommendations into a single place.

We are delighted that on 3 December 2019, the Resources and Public Realm Scrutiny Committee endorsed the recommendations of this inquiry and formally submitted the report to Cabinet. We hope that each of these recommendations will be considered in detail by the Cabinet and given a point-by-point response, and we trust that a Cabinet meeting will take place as early as possible in the New Year.

In the intervening period, the scrutiny inquiry is keen to do all it can to support the fast of these recommendations, and we would be happy to discuss them in further detail in order to support the creation of a more concrete delivery plan, with a clear timeline for their implementation. We are also happy to offer advice on the order in which these recommendations can be prioritised. We will also be pushing for a Full Council motion on air quality, in order to update the Council's previous motion on the climate emergency and signify the strength of our intent.

Based on the engagement we have had with stakeholders in Brent, we feel some of these recommendations could be funded from external sources without cost implications for the Council. For example, local organisations impacting on air quality in Brent should be expected to support the adoption and delivery of a non-resident air quality strategy, and fund the development of a public awareness campaign. However, we recognise that even in spite of this, some of these recommendations will require additional resources and may have staffing implications.

Given the ever-increasing political importance of the climate emergency and air quality, and the strong will amongst Brent residents to tackle these crises, we feel that the time has come for Brent to establish a dedicated team within the borough with sole and direct responsibility for driving forward the Council's policies on air quality and the climate emergency. These officers should then lead in developing and convening a steering group within the Council – drawing together officers from all Departments – in order to deliver on the objectives of the Council's air quality strategy and implement the recommendations of this report.

Full list of recommendations

RECOMMENDATION 1:

THAT THE COUNCIL UPDATE THE AIR QUALITY STRATEGY, AND SET OUT AN ASPIRATION TO MEET WORLD HEALTH ORGANISATION LIMITS ON AIR POLLUTION, COMMIT TO ADDRESSING INEQUALITY IN AIR QUALITY AND COMPLEMENT THE WIDER CLIMATE EMERGENCY AGENDA. WE SHOULD ALSO LOBBY NATIONAL GOVERNMENT WHERE WE ARE UNABLE TO EFFECT CHANGE OURSELVES.

We recommend that the objectives Brent Council sets to improve air quality in the borough be updated to:

- **Commit the Council to meeting and exceeding WHO limits on air pollution, whilst also acknowledging that there is no 'safe' limit of air pollution.** This would bring the Council in line with the GLA's Environmental Strategy and the air quality strategies in other Councils. We must also lobby the Government to set World Health Organisation (WHO) limits as the legal limit for air pollution in national legislation, and provide Councils with the necessary funding to meet them.
- **Set targets to address the inequality in air pollution between areas,** such that our air quality strategy objectives will not be met until the worst-affected neighbourhood in our borough meet limits on air quality. It should build on its existing approach to air quality hotspots and set a target to bring air quality in all of these hotspots within WHO limits
- **Acknowledge that our air quality objectives will not be met without a modal shift in the way we go out and about in the borough,** with a greater number and proportion of future journeys involving cycling, walking and public transport. This requires measures to support the greater use of active travel and public transport usage, and not simply encourage existing drivers to switch to electric and hybrid cars. It should explicitly raise awareness of and support initiatives such as the Ultra-Low Emission Zone, which evidence shows will be the most effective in improving air quality
- **Complement and reinforce the wider global heating and climate emergency agenda.** The air quality strategy must ensure that measures Brent Council takes to address air quality also contribute to meeting our wider climate objectives, and must not have the unintended effect of exacerbating the climate emergency. All policies in our action plan should be tested against this objective.
- **Where we are unable to make the changes ourselves, lobby national Government and the Greater London Authority for the changes and funding we need.** This will help foster public confidence in our air quality strategy, and make it clear where we are prevented from implementing certain policies by factors outside of our control.

Amongst other things, we should lobby for:

- The Government to enshrine a right to clean air in national legislation.
- Better workplace air quality standards, so that they reflect the actual health impact of poor air quality on the workforce, and work with trade unions to consistently promote air quality as an occupational health issue as well as a public health issue.

- Stronger legislation to take action against engine idling, such that in certain instances, most especially around schools, fines for idling can be issued more easily than at present without the need to first ask drivers to turn off their engines.
- Make it easier for councils to take enforcement action against wood and waste burning, where this is having a proven negative impact on air quality.
- Companies like Amazon, JustEat and other delivery firms to take a more responsible approach to their deliveries, which minimises air quality impact – for example by pooling together deliveries, using cyclists as deliverers and delivering to community ‘hubs’ rather than individual addresses where possible.

The Council should also regularly engage with experts in air quality, including the London Air Quality Network of King’s College London (of which we are already a member) in order to maintain an up-to-date picture of the health impact of air quality and the factors which cause poor air quality. It should pay particular regard to the evidence of the air quality impact of electric vehicles, and the growing understanding of the specific chemicals within particulate matter which cause most damage to human health.

In order to signify the strength of the Council’s intent in this area and further codify some of these objectives, there should be a Full Council motion on air quality, updating and enhancing the Council’s previous commitments in its climate emergency motion.

RECOMMENDATION 2:

THAT THE COUNCIL, IN CONSULTATION WITH TFL AND THE FA, AGREE A STRATEGY TO REDUCE THE AIR QUALITY IMPACT OF NON-RESIDENT CAR USAGE IN BRENT.

Brent Council, working with Transport for London, the Football Association and others, should put in place a dedicated strategy on non-resident car usage in the borough. This strategy will work to reduce non-resident car usage across the borough, and encourage people to use alternative modes of travel when visiting and driving through Brent.

As part of this strategy, the Council should consider:

- **Agreeing caps to non-resident parking with the FA on event days.** The present maximum provision of 2,900 commercial car parking spaces should never be exceeded, and no further commercial parking provision should be provided for event days. Indeed, significantly lower limits should be agreed on a case-by-case basis depending on the identified capacity requirements at individual events, with the Council adopting a presumption in favour of the lowest possible limits.
- **Working with Transport for London and the FA to reconsider the current redirection of bus routes during Wembley event days.** This risks sending completely the wrong message to both residents and non-residents alike, making it easier for people to drive than to use public transport. It should work alongside the FA to develop their proposals to stop this by improving infrastructure around Wembley Triangle, so that it will not need to be closed to public transport during event days.
- **Build on the diesel surcharge by working with Quintain, the FA and other commercial car parks in Brent to agree emissions-based parking charges,** along the same lines of Brent

Council's diesel surcharge. This would help penalise the most polluting non-resident drivers, and encourage people to shift to lower emission forms of transport.

- **Reconsidering the current placement of event day Controlled Parking Zones, and updating it in light of new evidence of where it is taking place.** It should particularly consider extending them around tube stations in the borough. Such measures would prevent non-resident parking in more areas of the borough during event days, at a minimal annual cost to local residents. It could also support the FA and others in taking enforcement action against drivers.
- **Actively supporting proposals to expand railway, tube and public transport provision to reduce car usage on event days.** The Council should support measures to expand capacity in Wembley Stadium and Wembley Park and increase the number of railway journeys to Wembley Central station. We expand on these proposals in Recommendation 6.
- **Working with the FA to eliminate the use of pirate parking during event days.** We should work to undertake joint patrols with HM Revenue & Customs to tackle parking businesses which are not registered for tax purposes, and review the parking licenses of any car parks found to be undertaking pirate parking.
- **Taking measures to improve the enforcement of the event day CPZ,** including by considering larger fines for breaches (or lobbying for the levying of larger fines), because at present the fines for breaching the CPZ are comparable to the cost of using commercial car parks anyway. We should also ensure the CPZ is enforced at all hours, including late-day and weekend football matches, and consider the use of clamping and greater provision of vehicle toeing to combat non-resident parking.
- **Expand the use of public health messaging and awareness-raising about air quality along the North Circular, and during event days.** We expand on this proposal in Recommendation 10, when we consider the role that public health messaging and awareness-raising could play in addressing issues with air quality.
- **Encourage greater use of cycling to event days,** by increasing cycle storage provision around the stadium and providing a route to the stadium via the forthcoming Willesden-to-Wembley Cycle Superhighway.
- **Consider the potential merits of a highly targeted levy to tackle non-resident parking in the borough, along the lines of that implemented in Nottingham.** The Council should explore the applicability of this levy to Brent, and identify whether highly targeted areas of the borough could benefit from a similar levy, with the proceeds used to fund affordable public transport initiatives. It should actively work with London Councils which are considering similar limits, such as Hillingdon and Camden.
- **Demanding that IKEA Wembley, Tesco and other supermarkets and retail stores take urgent steps to promote active travel and lower-emissions travel from non-residents to their stores in Brent,** including by installing electric vehicle charging points in car parks, making provision for more cycle storage and working to improve pedestrian and cyclist access to their stores.
- **Working, in full consultation with residents, to take measures against non-resident driving through residential streets in Brent, including rat runs.** This could include measures to block through-traffic through residential streets, along the lines of schemes implemented in Waltham Forest (see Recommendation 5 for further details). Such measures should only be implemented with the consent of local residents and on a case-by-case basis, in response to local concerns about non-resident driving.

- **Considering the use of Low Emission Neighbourhoods in areas heavily impacted by non-resident driving and event day activities**, in order to prevent high-emission vehicles from travelling in these areas. This should be a particular priority in residential streets heavily impacted by event day activities and non-resident driving on and around the North Circular and other major roads in Brent.

RECOMMENDATION 3:

THAT THE COUNCIL SET UP A GREEN BRENT PARTNERSHIP: A FORUM WITH ORGANISATIONS IMPACTING AIR QUALITY IN BRENT –INCLUDING THE PRIVATE SECTOR, COMMUNITY ORGANISATIONS AND CAMPAIGN GROUPS – TO AGREE SHARED TARGETS TO IMPROVE AIR QUALITY LOCALLY. WE SHOULD ALSO LEAD BY EXAMPLE BY TAKING STEPS TO REDUCE THE AIR QUALITY IMPACT OF BRENT COUNCIL’S OWN ACTIVITIES.

Building on the success of Brent’s Climate Assembly, and learning lessons from similar initiatives in central London such as the Cross River Partnership, Brent Council should establish an ongoing forum with stakeholders in Brent (working title: ‘Green Brent Partnership’) , to identify ways we can all work together to improve air quality in the borough. Members of the partnership should include, but should not be limited to, the Royal Mail, IKEA Wembley, local supermarkets, the Football Association, retail outlets such as London Designer Outlet, food providers, Clean Air for Brent and Brent Cycling Campaign.

The Green Brent Partnership should work with stakeholders in Brent to, amongst other things:

- **Agree a shared set of goals to improve air quality in the borough**, and regularly monitor and provide updates on progress in meeting these goals. Each member of the partnership which has an impact on air quality locally should agree these targets, and the Council should play a leading role in assessing their progress in meeting these objectives.
- **Developing a freight strategy for Brent to integrate procurement and delivery processes to minimise impact on air quality.** This should draw from the expertise of the West London Alliance. West Trans and the Cross-River Partnership. As part of this, the Council should conduct a pilot into integrating procurement processes in a town centre in Brent; review the journey times of delivery vehicles to minimise travel during rush hour; and work with businesses to improve emissions standards of delivery vehicles.
- **Encourage people and businesses to use zero emission forms of delivery**, such as the ‘green last mile’: using bikes rather than vehicles to deliver goods to their final destination.
- **Encourage residential developments in Brent to streamline and reduce vehicle deliveries**, encouraging residents and businesses to pool deliveries to reduce air quality impact and deliver items to community ‘hubs’ rather than directly to residential areas. Sites such as Box Park, local supermarkets, community libraries and every local station in Brent should be considered as potential locations for these hubs.
- **Promote the provision of cycle storage, electric vehicle charging and emissions-based parking charges in customer car parks across the borough**, including in IKEA Wembley, local supermarkets and commercial car parks.
- **Promote and highlight the savings which businesses could make from better procurement processes**, whilst at the same time significantly improving air quality. Where measures are not cost-saving, the Council should review the possibility of a scheme to provide business

rates relief to these businesses in order to incentivise measures which deliver public health benefit.

In each of these cases, Brent Council itself should also lead by example, to show the way to organisations throughout Brent. We recommend that the Council:

- **Set a clear timeline for greening its own fleet**, including bin lorries and council vehicles, as part of its 'Project 2023' initiative.
- **Review the travel times of Council vehicles**, to minimise travel during rush hour and areas of worst air quality impact where possible.
- **Establish the impact which poor air quality, is having on its own council employees and contractors**, in order to encourage all other employers to meet their legal obligations in this area.
- **Develop a workplace 'green travel policy'** for Council employees, Councillors and others who use Brent Council facilities, minimising the use of car travel and supporting the use of active travel and public transport.
- **Regularly review and report on the air quality impact of Brent Council's pension fund investments**, and seek to invest in initiatives with minimal poor air quality impact where this is prudent and consistent with the Pension Fund's fiduciary duties.
- **Ensure the materials used in the Council's own manufacturing process keep air quality and environmental damage to a minimum**, including footways and housing improvements.

RECOMMENDATION 4:

THAT THE COUNCIL CLOSELY MONITOR AND REVIEW THE AIR QUALITY IMPACT OF CURRENT POLICIES, MOST PARTICULARLY THE ULTRA LOW EMISSION ZONE, AND CONSIDER IMPLEMENTING AND/OR LOBBYING FOR STRONGER MEASURES IF NECESSARY. IT SHOULD ALSO KEEP THE PROVISION OF AIR QUALITY MONITORING SITES UNDER CONSTANT REVIEW.

A number of positive steps have been taken to improve air quality in the borough, and evidence suggests that the forthcoming Ultra-Low Emission Zone (ULEZ) extension to the border of the North Circular will be by far the most effective in improving air quality in Brent. The Council should support this extension and seek to raise awareness about it, whilst also lobbying Transport for London and the Government for a trade-in scheme for those residents and businesses who currently use vehicles which are non-compliant with it.

But the ULEZ, and other policies, may also have knock-on effects which necessitate the use of further measures to improve air quality. There are also considerable concerns from residents just outside the ULEZ, especially those on the North Circular itself, who feel they will not see sufficient air quality benefits from the ULEZ.

We therefore recommend that the Council:

- **Raise awareness of the ULEZ extension to Brent residents and seek to build public support for it**, by highlighting the health benefits it will bring and seeking to secure a vehicle trade-in scheme for affected residents and businesses from the Greater London Authority and the Government

- **Seek to maximise the number of people who switch to active travel and public transport as a result of the ULEZ**, by making public transport usage and active travel easier and more affordable; and ensuring all vehicle trade-in schemes for non-compliant vehicles provide an equal and opposite financial incentive for drivers to switch to active travel and public transport instead.
- **Pay particular regard to the impact of the ULEZ north of and including the North Circular, and consider the provision of measures such as Low Emission Zones and other initiatives should progress be insufficient** – for example, if an increased number of vehicles park ‘just’ outside the ULEZ and enhance traffic pressures.
- **Work closely with other Local Authorities along the North Circular to agree a shared approach to the ULEZ**, and jointly lobby TfL on this area where air quality impact is not sufficient.
- **Review the impact that the ULEZ has on inequality in air quality in the borough.** Whilst the south of the borough currently tends to have the greatest issues in air quality, the ULEZ extension may necessitate a shift in focus towards the north of the borough where progress is less positive, and this may necessitate the use of further measures.
- **Particularly closely review the impact of the ULEZ on residential areas along the North Circular.** The scrutiny inquiry is deeply concerned about the considerable health effects of air pollution on these residents, and feels this needs to be particularly closely explored in any reviews of the ULEZ.

In addition, the Council should also continue to keep the provision of air quality monitoring stations under constant review. It should consider the provision of further monitoring stations where this may be necessary (eg to explore the impact of event days). However, the Council should also be clear to only use and promote effective air quality monitoring devices commissioned from reputable institutions, such as the London Air Quality Network from King’s College London. It should actively discourage residents, businesses and other public bodies from using poorer-quality and ineffective monitoring devices, and should encourage them to instead direct their funds towards measures which will tackle the underlying causes of poor air quality.

RECOMMENDATION 5

THAT THE COUNCIL MAKE THE DELIVERY OF HEALTHY STREETS A CENTRAL CORPORATE AND POLITICAL PRIORITY ACROSS THE BOROUGH, WORKING CLOSELY WITH LOCAL RESIDENTS TO EXPAND THE NUMBER OF HEALTHY STREETS LOCALLY.

Responsibility for delivery of this should involve all Departments in Brent, but should ultimately rest within the Highways Department and not Transport, because Highways will be able to integrate this approach within their operational work and routinely consider this whenever they consult on schemes or works need to be carried out. This also needs to feature centrally in a future Borough Plan, in Local Implementation Plan 3 and in the Local Plan.

In order to deliver this priority, Brent Council should set out a minimum offer to streets across the borough when considering improvements to areas:

- **Routinely consider how we can support healthy streets all our infrastructure and transport projects**, ensuring our highways team and others regularly consider how they can better-

promote healthy streets and active travel whenever works are due to take place or improvement projects are being carried out. As part of this, the Council should also proactively identify a list of streets in the borough which are most impacted by poor non-resident parking behaviour, such as rat runs, and work with these streets to introduce measures to address these issues.

- **Engage people on healthy streets initiatives at the earliest stage of projects, so they can genuinely feed into the process of developing ideas.** This will help address concerns that some early cycling infrastructure projects in Brent were as well-designed as they could be, and were consulted on too late in the developmental process. The Brent Public Transport Forum and Brent Active Travel Forums should be reinvigorated, with an expanded remit, to help ensure these conversations take place as early as possible and future projects are delivered to the highest standards. We should review the membership of these forums to ensure that campaign groups engaged in active travel in Brent have ex-officio membership of it.
- **Engage with residents about initiatives to tackle non-resident driving in residential streets,** such as blocking through-routes, 20mph speed limits, Low Traffic Neighbourhoods and modal filters, in order to make streets more friendly and accessible for residents. This raft of measures needs to be part of Brent Council's 'toolkit' whenever residents raise concerns about non-resident driving, building on our proposal in recommendation 2. Such initiatives should only be carried out with the consent of local residents and considered on a case-by-case basis where it is appropriate for local streets, and should be focussed on tackling residents' concerns about non-resident parking.
- **A more consistent and clear approach to the provision of 20mph zones needs to be established.** For many of these initiatives, 20mph speed limits will be an essential prerequisite to delivering other aspects of the healthy streets approach, and this should be factored into highway improvements. Greater provision of 20mph zones across the borough are also easier to enforce than piecemeal zones.
- **Give the provision of cycle storage, and cycle parking the same level of priority as electric vehicle charging.** Working with TfL, the Council should routinely look for opportunities to expand cycle storage space, most especially around tube stations. Opportunities to provide cycle storage in under-utilised car parking bays or on wide footways need to be routinely explored. Residents should be invited to bid for cycle storage using Community Infrastructure Levy funds. The Council should work to enhance the cycle storage capacity of its own housing stock, and continue to press for similar standards from Registered Providers, developers, businesses and others.
- **Ensure additional cycling space is not delivered at the expense of pedestrians, and vice-versa,** as has sadly sometimes been the case in other developments. The presumption should be in favour of encouraging active travel through reducing space for private car usage, or through creating extra space in other ways.
- **Review the current maximum provision of parking permits for households in Controlled Parking Zones,** with particular regard to the parking pressures caused by the larger number of permits which can be claimed by Houses of Multiple Occupation. The Council should seek to move away from the current "one size fits all" approach to CPZ permits regardless of household type or location. A cap on the number of permits in HMOs could significantly

reduce parking pressures in some residential areas, freeing up space for greater provision of more space for active forms of travel.

- **Extend the diesel surcharge to pay and display parking**, building on the current surcharge in controlled parking zones, in order to deliver a clear and consistent message about the impact of poor air quality and encourage the use of active travel and lower emission vehicles.
- **Continue to promote and expand the use of car free days**, building on the successful initiatives already established. The scrutiny inquiry feels that Brent's year as London Borough of Culture 2020 offers an enormous opportunity to promote the benefits of car free days on our streets, and our borough of culture team should exploit all opportunities to promote successful car free days on streets throughout 2020.
- **Ensure all future cycling initiatives are disability-inclusive**, and support the use of a wide range of cycling devices and not just bicycles. This requires the provision of sufficiently wide cycle ways, and it means avoiding certain traffic calming methods or blocks which – whilst easy for bicycles to get around – may prevent people with disabilities from using active travel methods.

RECOMMENDATION 6

THAT THE COUNCIL OUTLINE, PUBLISH AND CONSULT ON A CLEAR STRATEGY FOR ENGAGEMENT WITH TRANSPORT FOR LONDON ON ACTIVE TRAVEL INITIATIVES – INCLUDING THE PLANNED WILLESDEN-WEMBLEY CYCLE SUPERHIGHWAY, MEASURES TO IMPROVE PUBLIC TRANSPORT PROVISION AND ANY FUTURE INITIATIVES TO IMPROVE ACCESSIBILITY OVER THE NORTH CIRCULAR.

During the course of our inquiry, we have become aware that there are plenty of ideas across the borough on how we could better-promote active travel across the borough, and improve our infrastructure to make it easier for pedestrians and cyclists to go out and about.

In order to identify and exploit these opportunities, Brent Council needs to be open about its approach to engagement with TfL, using new forums – like the recently-convened Brent Climate Assembly, and the Green Brent Partnership (see recommendation 3) – to engage with residents about potential opportunities.

In drawing up this strategy, Brent Council should:

- **Make improving safety for pedestrians and cyclists a key corporate priority**, and address the misplaced *perception* of safety issues through improvements to the built environment.
- **Look to improve pedestrian and cyclist accessibility over the North Circular**, in order to reduce barriers between north and south Brent and promote more active forms of travel. The Council should work with TfL to explore the provision of more bridges over the North Circular in order to achieve this.
- **Actively lobby to improve public transport accessibility in under-served areas of the borough**, most particularly areas north of the North Circular with low Public Transport Accessibility Level ratings. The Council should work with TfL to devise a strategy to improve PTAL levels in areas of the borough where provision is poor.
- **Work with bus contractors to speed up the adoption of electric buses across Brent, as and when existing contracts expire**. The speed at which electric buses are adopted in Brent will

depend on the strength of the business case contractors present to TfL, and Brent Council must play a central role in making business cases for Brent bus routes as strong and robust as possible.

- **Prepare a plan to actively lobby for better public transport access for Brent for when the Chiltern franchise comes up for renewal in December 2021**, working to bring together Transport for London, local businesses, community groups and others together in a campaign for better railway transport access to the borough. For example, the strategy should include lobbying for a more regular service to Sudbury and Harrow Road station as part of the Chiltern franchise.
- **Lobby strongly to improve the affordability of public transport in the borough**, seeking to secure special dispensation from TfL to be part of a cheaper ticketing zone, along the same lines as Stratford, and inserting this as an objective in Local Implementation Plan 3.
- **Set out clear proposals for a Willesden-Wembley Cycle Superhighway**, and fully consult with local residents on how this project should be delivered. As noted in Recommendation 2, the Council should explore extending the superhighway to Wembley Park to increase cycle usage on event days.
- **Work alongside the FA to lobby for improved capacity in stations including Wembley Park, Wembley Stadium and Wembley Central** in order to reduce car usage on event days, as set out in Recommendation 2.

RECOMMENDATION 7

THAT THE COUNCIL EXPAND THE NUMER OF INITIATIVES FOR DEALING WITH THE AIR QUALITY IMPACT OF HOUSING AND THE BUILT ENVIRONMENT, AND ENGAGE CLOSELY WITH EXPERTS TO CONSIDER FURTHER STEPS AS NEW EVIDENCE AND TECHNOLOGY EMERGES.

We recommend that the Council consider taking action in the following additional areas:

- **Consider using proceeds from the Council's forthcoming Carbon Offset Fund to invest in initiatives to reduce the air quality impact of heating in homes and businesses**, along the same lines as steps taken by carbon offset funds in other Councils, such as the Croydon Healthy Homes Scheme.
- **Address the air quality impact of commercial cooking, particularly in town centres**. Other councils' air quality strategies have identified this as a key issue. It is also a key occupational health hazard, and offers an opportunity for greater engagement and partnership with trade unions. Brent's air quality action plan should set out steps which could be taken here, and the Green Brent Partnership (see recommendation 3) should be empowered to work with businesses in town centres to address these issues.
- **We should consider further steps to improve heating standards in private rented housing and Registered Providers**. The Housing Department should consider whether more stringent PRS licensing standards could help drive up standards in the sector, and it should also actively engage with Registered Providers to ensure that the air quality standards of their own housing stock are improved in line with ours. The Council should also set a clear timeline for the delivery of improvements of air quality standards in our housing stock.
- **There should be a public awareness and lobbying campaign to address issues with the air quality impact of wood burning and waste burning**. A seasonal campaign against wood

burning could help highlight the severe impact this causes. Where Brent Council is prevented from taking enforcement action due to restrictions in national legislation then, as set out in recommendation 1, we should lobby for more stringent laws.

Because the evidence on the air quality impact of these factors (and the best ways to address them at a local level) is still in the process of being developed, we recommend that the Council closely engage with experts on this and stay regularly updated on the evidence. Where new technology is able to reduce the air quality impact of heating and cooking processes, the Council should work through the Green Brent Partnership to actively encourage greater use of this by businesses and developers.

RECOMMENDATION 8

THAT THE COUNCIL CONTINUE TO PROMOTE GREEN SPACE AS A WAY OF SUPPORTING ACTIVE TRAVEL, AND BECAUSE OF ITS WIDER BENEFITS TO HEALTH, THE CLIMATE AND BIODIVERSITY, BUT ENSURE THAT MEASURES TO IMPROVE GREENING ARE NOT PROMOTED AS AN ALTERNATIVE TO DEALING WITH THE UNDERLYING CAUSES OF POOR AIR QUALITY.

The scrutiny inquiry is extremely supportive of the greater use of green space for a whole host of reasons, not least the measurable impact it has on mental health and wellbeing and its potential to reduce CO2 levels. However, the evidence we have received from experts has been clear that the provision of green space is not effective in improving air quality. The only effective way of addressing poor air quality is to address the underlying causes of it, and it would be greatly misleading to promote green space as a way of mitigating these problems.

Green space does, however, have a significant indirect benefit on air quality, as it can make areas more attractive for pedestrians and cyclists. In some road schemes it can also be used as an attractive way of slowing traffic down and thus promoting active travel and addressing concerns about safety. In many cases, areas in greatest need of green space are also areas of poor air quality, and therefore clearly require significant investment in green space for a whole host of reasons.

The scrutiny inquiry therefore recommends that the Council take an evidence-based approach to the promotion of green space in its air quality strategy. The Council should promote the use of green space as a way of helping to change behaviour and encourage modal shift, and should invest in greater provision of green space across the borough (including in air quality hotspots), but it should not risk creating the misleading impression that more green space could ever tackle the underlying causes of air quality on its own.

This should not, however, detract from the fact that the Council needs to considerably expand the amount of green space and trees available in Brent, for a whole host of wider reasons. We therefore encourage the Council to expand the availability of green space across the borough, and ensure there is no net reduction in green space or net loss of trees as a result of any of the Council's developments and initiatives, including the footways improvements programme.

RECOMMENDATION 9

THAT THE COUNCIL CONTINUE TO PROMOTE MEASURES TO IMPROVE AIR QUALITY IN OUR SCHOOLS, AND WHERE POSSIBLE ENHANCE AND EXPAND ON EXISTING INITIATIVES. IT SHOULD WORK IN PARTNERSHIP WITH SCHOOLS AND STUDENTS TO AGREE A SHARED APPROACH TO IMPROVING AIR QUALITY IN THE BOROUGH.

The scrutiny inquiry is fully supportive of the measures Brent Council has already taken in this area, and particularly welcomes the school street pilots which are currently being implemented. We also agree with the objective to pursue STARS accreditation for all schools, and support the ongoing audits of air quality in our schools and nurseries.

But in order to encourage more schools to participate, it is important Brent Council builds on this success, and plays a leading role in the borough in promoting air quality in our schools. This will help protect and support those schools which have taken leadership locally, giving head teachers, parents and students the support they need.

We therefore recommend that the Council:

- **Work with schools to identify how it can address air quality issues around schools.** Schools which lead the way in improving air quality can only go so far, and the Council must play its part in addressing air quality around schools, most especially from non-residents. When we engage with schools we need to ensure that a multi-disciplinary team of Council officers, from the highways team and otherwise, also engage with schools and actively discuss what steps we could take to support them.
- **Expand the school streets initiative, and consider a presumption in favour of school streets where there is support from local residents.** This will help deliver improvements across the board in Brent, and help better-support those schools which have been at the vanguard of improving air quality in their areas.
- **Set out a specific strategy to improve air quality in schools near main roads,** where school streets cannot be introduced. This could include changing the location of entrances to students so they do not have to walk to school on main roads, and considering the use of Low Emission Neighbourhoods and better traffic management to address the poor air quality impact of main roads. The Council must also ensure that air pollution levels in any new schools built in the borough are within legal limits, and that a clear strategy is always in place to ensure this.
- **Work with schools to undertake an annual survey of school travel methods.** This survey should particularly look at the distance from homes, as the scrutiny inquiry has received evidence suggesting that because of the small size of many primary school catchment areas many car journeys are in fact shorter distances than might be assumed. A 'league table' of schools based on use of active travel should be created. We feel the provision of this survey could be funded using funding from an external source within Brent, such as a developer in Wembley.
- **Take a zero-tolerance approach to parking on yellow lines around schools and/or vehicle idling around schools,** and strive for better enforcement of these standards during and outside of the school run. Whilst we acknowledge that stronger enforcement measures are

not always possible due to the restrictions of the Protection of Freedoms Act 2012, the Council should strive to be innovative in the approaches it takes to enforcement.

- **Build on the commitment for active travel plans and TfL Safer Travel: Active Responsible, Safe (STARS) accreditation, further engaging with Brent schools to deliver active travel plans and STARS accreditation.** Schools which are not taking part in the STARS initiative and/or which have yet to develop active travel plans need to be publicly identified and supported to become accredited, and we should set a target for all schools to achieve 'gold' STARS accreditation by a set date.
- **Work with schools to insert some commitments to active travel in home/school agreements,** so that clear commitments and a shared understanding is made between parents and schools around school travel methods, where there are no mitigating circumstances.
- **Involve schools, children and young people in the delivery of broader public health messages on air quality, and support schools to provide educational materials on air quality.** The scrutiny inquiry feels there is considerable untapped potential in involving young people in public awareness campaigns around air quality, and making innovative use of CIL and LWYL funds to help them deliver hard-hitting messages about the impact it is having. This will also support their education and help equip teachers to raise awareness about the impact of air quality. We expand on this suggestion in Chapter 8 of this report.
- **Prevent children being exposed to air pollution from ice cream vans.** This is a hugely emotive issue and the scrutiny inquiry received a number of representations from parents about this problem, as they were rightly concerned about their childrens' exposure to poor air quality from idling ice cream vans. Following the approach taken by Camden Council, Brent Council should look to implement restrictions on the locations of ice cream vans, and set out a strategy – working with manufacturers of vans – to bring exhaust emissions of all ice cream vans down to zero.
- **Devise a strategy to address air quality and improve active travel in nurseries, secondary schools, colleges, sixth forms and universities,** where many of the principles set out in primary school engagement will need to be applied in future. For secondary schools, colleges, sixth forms and universities, there should be a presumption in favour of active travel for all students, and educational institutions should be actively discouraged from introducing all but the most essential parking provision.
- **Convene an air quality and climate emergency summit with all schools in Brent,** inviting school councils, school management and teachers' unions to agree a shared approach to improving air quality in the borough. This summit could act as a catalyst for more shared action in this area, and help provide students in schools with important educational resources to help them understand issues with air quality and how they might work to address them.

RECOMMENDATION 10

THAT THE COUNCIL, WORKING WITH THE HEALTH SECTOR, STATUTORY PARTNERS AND BRENT'S PUBLIC HEALTH TEAM, SPEARHEAD A PUBLIC HEALTH AWARENESS AND BEHAVIOURAL CHANGE CAMPAIGN ABOUT AIR QUALITY. THE LOCAL NHS SHOULD ALSO PLAY ITS FULL PART IN DELIVERING THIS, AND LEAD BY EXAMPLE IN THE MEASURES THEY TAKE TO IMPROVE AIR QUALITY.

This public awareness and behavioural change campaign must be delivered according to the principles set out earlier in chapter 8. It must particularly focus on using all existing assets and opportunities available to deliver public health messages, and thinking about all the potential opportunities to get messages out to people. We believe there is scope for the funding of this to be leveraged from external sources, both in-cash and in-kind.

We recommend that the strategy:

- **Broaden the fight against engine idling, by working to ensure a broader range of enforcement officers and members of the public are able to deliver these messages to drivers.** For example, all FA staff at Wembley event days should be trained and equipped to challenge those caught idling vehicles and volunteers should be used at times of heavy traffic to deliver public health messages on idling to vehicles, as they have been successfully in parts of central London.
- **A creative approach should be taken to delivering public health messages on a wide range of assets, both Council-owned and non-Council-owned.** For example anti-idling messages should also be widely displayed on event days, including on the vests of FA staff and in FA display screens. The Brent Magazine and Brent Council website should also be used to full effect.
- **Particularly focus on delivering messages to non-residents travelling through the borough,** such as on the North Circular and on Wembley event days. We should work with Transport for London to deliver messages about air quality impact directly to those who are having the greatest effect in the borough.
- **Challenge misperceptions and myths about air quality,** making it clear that car drivers are more exposed to ambient air pollution than pedestrians and cyclists and highlighting that the way you drive can significantly affect air pollution.
- **Involve the whole community in delivering public health messages,** considering innovative use of CIL and LWYL funds to promote messages about air quality. The whole community should also be involved in initiatives to tackle engine idling in times of heavy traffic, delivering public health messages to drivers to turn off their engines.
- **Focus on the positive impact that improving air quality can bring, and appeal to people's self-interests.** Air quality hotspots, which are the focus of Council action on air quality, should be framed in positive rather than negative terms – highlighting the positive action that is being taken.
- **It must use intelligible, easy-to-understand public health data about the impact of air quality.** Ideally, the campaign should be informed by clear, local public health data on the impact of poor air quality – such as ventilator usage.
- **It should promote the wider use of apps and other monitoring devices, including AirText,** so people who are particularly vulnerable to unclean air know when air quality levels outside are at unsafe levels.
- **It must include a seasonal campaign to raise awareness about the impact of wood and waste burning,** especially during the winter months, and highlight the enforcement action which can be taken to those found in breach of air quality standards.

As part of this campaign, the health sector locally must itself lead by example. We recommend that:

- **The local health service quantifies the impact of poor air quality on health**, so the Council can use this to inform public health messages. The success of these messages, and of the wider air quality strategy, should partly be measured based on whether Brent sees a reduction in the health impact of poor air quality.
- **The local NHS, in collaboration with the Council, actively lobby TfL for better public transport provision to hospitals and general practices**, in order to reduce the air quality impact of hospital journeys and better-support the most vulnerable residents.
- **Trusts across the North West London Collaboration of CCGs declare a climate emergency and commit to taking measures to improve air quality**, along the lines taken by trusts in other parts of the UK

Appendix

Appendix A – Full list of scrutiny inquiry evidence sessions and stakeholders engaged with

In addition to the below specific meetings, general appeals for information were also sent out to a range of other organisations, including Extinction Rebellion Brent, Brent Friends of the Earth and a number of residents' associations and community groups across the borough. The profile of the scrutiny inquiry was further raised thanks to a meeting of Clean Air for Brent on Tuesday 12 November.

As a result of this general engagement, a number of pieces of written evidence were submitted by a number of members of the public and residents' associations. They were responded to on a case-by-case basis by the Chair and shared with the wider scrutiny inquiry. The representations made by these individuals have played a crucial role in informing the recommendations of this inquiry.

MEETING	WITNESSES
THURSDAY 15 AUGUST BRENT COUNCIL'S AIR QUALITY STRATEGY: AN OVERVIEW	<ul style="list-style-type: none"> Chris Whyte, Operational Director of Environment Services Simon Legg, Head of Regulatory Services, Environment Services (air quality monitoring) Debbie Huckle, Team Leader – Safety & Travel Planning, Highways and Infrastructure Sandor Fazekas, Projects Development Manager, Highways and Infrastructure Seymour Zajota, Air Quality Project Officer Paul Lewin, Team Leader – Plan Making, Planning Transport and Licensing Chatan Popat, Corporate Performance Team Leader, Strategy and Partnerships Sean Gallagher, Head of Service – Housing Management Property, Housing Emily Rae-Maxwell, External Partnerships Manager, Housing Mark Wilsmore, Managing Director, Ace Café Wembley
WEDNESDAY 28 AUGUST ADDRESSING AIR QUALITY THROUGH PUBLIC AWARENESS AND BEHAVIOURAL CHANGE	<ul style="list-style-type: none"> Tim Evans, Environmental Consultant and former Civil Servant at the Department for Energy and Climate Change
THURSDAY 29 AUGUST CASE STUDY: AIR QUALITY IN CHAMBERLAYNE ROAD AND KENSAL RISE	<ul style="list-style-type: none"> Fiona Mulaisho, Air Quality Advocate and Secretary of the Kensal Rise Residents' Association James Hewitt, Independent Environmental Consultant
THURSDAY 5 SEPTEMBER PARTNERSHIPS REPORT FROM COUNCIL: IDENTIFICATION OF STAKEHOLDERS TO IMPROVE AIR QUALITY	<ul style="list-style-type: none"> Chris Whyte, Operational Director, Environment Services Sandor Fazekas, Projects Development Manager, Highways and Infrastructure

MONDAY 9 SEPTEMBER PUBLIC HEALTH AND AIR QUALITY	<ul style="list-style-type: none"> • Cllr Krupesh Hirani, Cabinet Member for Public Health, Culture & Leisure • Melanie Smith, Director of Public Health
MONDAY 9 SEPTEMBER CASE STUDY: CAMDEN COUNCIL'S AIR QUALITY STRATEGY	<ul style="list-style-type: none"> • Cllr Adam Harrison, Cabinet Member for a Sustainable Camden • Plus Officers from Camden Council
TUESDAY 17 SEPTEMBER CASE STUDY: BIRMINGHAM CITY COUNCIL'S AIR QUALITY STRATEGY	<ul style="list-style-type: none"> • Cllr Waseem Saffar, Cabinet Member for Transport and Environment, Birmingham City Council
TUESDAY 1 OCTOBER ADDRESSING AIR QUALITY THROUGH CYCLING AND ACTIVE TRAVEL	<ul style="list-style-type: none"> • Simon Munk, Infrastructure Campaigner, London Cycling Campaign • Charlie Fernandes, Brent Cycling Campaign • David Arditti, Brent Cycling Campaign • Henry Lancashire, Brent Cycling Campaign • Sylvia Gauthereau, Campaign Co-Ordinator, Brent Cycling Campaign
WEDNESDAY 16 OCTOBER PRESENTATION FROM CLEAN AIR FOR BRENT	<ul style="list-style-type: none"> • Sarah Crawley, Clean Air for Brent • Mark Falcon, Clean Air for Brent • Robin Sharp CBE, Clean Air for Brent
WEDNESDAY 23 OCTOBER TRANSPORT FOR LONDON: BUSES, ACTIVE TRAVEL AND ROAD TRAFFIC	<ul style="list-style-type: none"> • Various Transport for London Officers responsible for bus policy, active travel and road traffic modelling
THURSDAY 7 NOVEMBER TRADE UNIONS AND AIR QUALITY: ADDRESSING AIR QUALITY AS AN OCCUPATIONAL HEALTH HAZARD	<ul style="list-style-type: none"> • Mick Holder, Trade Union Clean Air Network
MONDAY 11 NOVEMBER CASE STUDY: WALTHAM FOREST'S AIR QUALITY STRATEGY	<ul style="list-style-type: none"> • Cllr Clyde Loakes, Deputy Leader, London Borough of Waltham Forest
TUESDAY 12 NOVEMBER CASE STUDY: ADDRESSING AIR QUALITY IN ARK FRANKLIN PRIMARY ACADEMY	<ul style="list-style-type: none"> • Janine Ryan, Principal of Ark Franklin Primary Academy
WEDNESDAY 13 NOVEMBER CASE STUDY: THE FOOTBALL ASSOCIATION'S APPROACH TO ADDRESSING POOR AIR QUALITY	<ul style="list-style-type: none"> • Representatives from the Football Association, Wembley Stadium
THURSDAY 14 NOVEMBER MEETING WITH KING'S COLLEGE LONDON'S ENVIRONMENTAL RESEARCH GROUP	<ul style="list-style-type: none"> • Dr Ian Mudway, Lecturer in Respiratory Toxicology, King's College London Environmental Research Group
FRIDAY 15 NOVEMBER CONSIDERATION OF DRAFT RECOMMENDATIONS	<ul style="list-style-type: none"> • Private meeting of the Air Quality Scrutiny Inquiry
MONDAY 18 NOVEMBER TRANSPORT FOR LONDON: THE ULTRA-LOW EMISSION ZONE	<ul style="list-style-type: none"> • Representatives from Transport for London responsible for the Ultra-Low Emission Zone

MONDAY 18 NOVEMBER
FURTHER DISCUSSION OF DRAFT
RECOMMENDATIONS

TUESDAY 19 NOVEMBER
TEACHERS' UNIONS AND AIR QUALITY:
MEETING WITH THE NATIONAL
EDUCATION UNION

TUESDAY 3 DECEMBER
EVIDENCE FROM CLEAN AIR FOR LONDON

- Cllr Krupa Sheth, Cabinet Member for the Environment
- Sandor Fazekas, Projects Development Manager, Highways and Infrastructure
- Chris Whyte, Operational Director of Environment Services
- Jenny Cooper, Brent District Joint Secretary, Brent State Education Branch, National Education Union
- Simon Birkett, Clean Air for London

Appendix B – Reports received and evidence-gathering sessions attended by inquiry

As noted earlier, the scrutiny inquiry commissioned five reports directly from Brent Council to inform the work of our inquiry:

- **Report 1:** A situation analysis of air quality in Brent, which was used to inform Chapter 1 of this report
- **Report 2:** Progress update on Brent Council's 2017-2022 Air Quality Action Plan
- **Report 3:** A partnerships report, detailing a range of local organisations within Brent which have an impact on air quality in the borough
- **Report 4:** A further report providing answers to a range of questions asked by the scrutiny inquiry, including on the 'STARS' accreditation of Brent's schools, localised data on air quality hotspots in Brent and information on the air quality impact of planning developments approved in Brent
- **Report 5:** A report from Brent Council's public health team on air quality in the borough

In addition to this, the scrutiny inquiry also received reports from a number of external organisations. Scrutiny inquiry members also had an opportunity to broaden their knowledge by attending a number of external meetings during the course of this inquiry:

- We received a report from 20's Plenty, making the case for a borough-wide 20mph zone
- The Football Association provided additional written evidence to the inquiry on car usage during Wembley event days, ahead of our evidence sessions with them
- The Chair of the scrutiny inquiry raised the work of the inquiry during a meeting of the Brent teachers' Joint Consultative Committee on Thursday 25 July, and discussed air quality in schools with a number of attendees at that meeting
- On Tuesday 10 September, the Chair of the scrutiny inquiry attended the London Sustainability Exchange event 'Ideas to action: an air quality exchange', where a number of presentations from organisations were made on best steps to address air quality in the borough
- The Chair of the scrutiny inquiry attended a meeting of the Brent Youth Parliament on Saturday 28 September, where he raised awareness about the work of the air quality scrutiny inquiry and answered a number of questions young people had about the work of the inquiry

- Finally, on Tuesday 12 November the Chair of the scrutiny inquiry spoke about the work of the scrutiny inquiry at Clean Air for Brent's Annual General Meeting, and answered a number of questions residents and campaigners had about the work of the inquiry

Appendix C – Additional tables and figures

Table 5. STARS and active travel accreditation of Brent schools. Source: Brent Council.^{153,154}

School Name	STARS accreditation	Active travel plan
Al-Sadiq and Al-Zahra Schools	No	Gold
Alperton Community School	Gold	Silver
Anson Primary School	No	No
Ark Academy	No	No
Ark Elvin Academy (formerly Copland Community School)	No	No
ARK Franklin Academy	No	No
Ashley College - medical needs pupil referral unit	No	No
Barham Primary School	Gold	Gold
Bnos Beis Yaakov Primary School	No	No
Braintcroft Primary School	No	No
Brent River College	No	No
Brentfield Primary School	Bronze	No
Brondesbury College London	No	No
Buxlow Preparatory School	No	No
Byron Court Primary School	Gold	Gold
Capital City Academy	No	No
Carlton Vale Infant School	Gold	Gold
Chalkhill Primary School	Gold	Gold
Christ Church C of E Primary School	Gold	Gold
Claremont High School	Gold	Gold
College Green Nursery School	No	No
Convent of Jesus and Mary Catholic Infants School	No	No
Convent of Jesus and Mary Language College	Gold	Gold
Curzon Crescent Childrens Centre	No	No
Donnington Primary School	Bronze	No
Elsley Primary School	Gold	Gold
Fawood Childrens Centre	No	No
Fryent Primary School	Gold	Bronze
Furness Primary School	Silver	Bronze
Gladstone Park Primary School	No	No
Gower House School	No	No
Granville Plus Nursery School	No	No
Harlesden Primary School	Bronze	No
Islamia Girls' Secondary School	No	Gold
Islamia Primary School	No	No
JFS	No	No
John Keble C of E Primary School	Gold	Gold

Kilburn Grange School	No	No
Kingsbury Green Primary School	No	No
Kingsbury High School	Bronze	No
Leopold Primary School	No	Gold
Lyon Park Primary School	No	No
Malorees Infant School	No	No
Malorees Junior School	No	No
Manor School	No	No
Maple Walk	Gold	Gold
Michaela Community School	No	No
Mitchell Brook Primary School	No	Gold
Mora Primary School	Gold	Gold
Mount Stewart Infant School	Gold	Gold
Mount Stewart Junior School	Silver	Silver
Newfield Primary School	No	No
Newman Catholic College (formerly Cardinal Hinsley)	No	No
Noam Primary School	No	No
North West London Jewish Day Primary School	No	No
Northview Primary School	No	No
Oakington Manor Primary School	No	No
Oliver Goldsmith Primary School	No	Gold
Our Lady of Grace Catholic Infants School	Gold	Gold
Our Lady of Grace RC Juniors School	Gold	Gold
Our Lady of Lourdes Catholic Primary School	Gold	Gold
Park Lane Primary School	Gold	Gold
Phoenix Arch School	Gold	Gold
Preston Manor School	No	No
Preston Park Primary School	Bronze	No
Princess Frederica C of E Primary School	No	Gold
Queens Park Community School	No	Bronze
Roe Green Infant School	Gold	Gold
Roe Green Junior School	Silver	No
Roe Green Strathcona	Gold	Gold
Salisbury Primary School	Gold	Gold
Sinai Jewish Primary School	No	No
St Andrew and St Francis C of E Primary School	Bronze	Silver
St Christophers School	No	No
St Gregorys Science College	No	No
St Josephs Catholic Infant School	Gold	Gold
St Joseph's Catholic Junior School	Gold	Gold
St Josephs Catholic Primary School	Gold	Gold
St Margaret Clitherow Catholic Primary School	No	No
St Mary Magdalens Catholic Junior School	Gold	Gold
St Marys C of E Primary School	Silver	Gold
St Marys Catholic Primary School	No	No
St Nicholas School	No	No
St Robert Southwell Catholic Primary School	Gold	Gold
Sudbury Primary School	Gold	Gold

The Crest Academy
 The Kilburn Park School Foundation
 The School of the Islamic Republic of Iran
 The Stonebridge Primary School
 The Swaminarayan School
 The Village School
 Torah Temimah Primary School
 Uxendon Manor Primary School
 Wembley High Technology College
 Wembley Primary School
 Woodfield Secondary School
 Wykeham Primary School

No	Gold
No	No
No	No
Gold	Silver
No	No
No	No
No	No
Gold	Gold
No	No
No	No
Bronze	Bronze
Silver	Bronze

Bibliography

References

- ¹ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ² Philip J Landrigan et al, [The Lancet Commission on pollution and health](#), Volume 391, Issue 10119, 3 February 2018
- ³ Kilburn Times, [Brent listed three times in ten of worst air pollution breaches across the UK](#), 3 April 2019
- ⁴ NB this report and its recommendations was written by Cllr Thomas Stephens as Chair of the inquiry, with drafts extensively commented on, scrutinised and amended by scrutiny inquiry members and council officers, who proved instrumental in informing the work of this report. Any remaining errors and inaccuracies, however, remain the fault of the Chair.
- ⁵ Department for Environment, Food and Rural Affairs and Department for Transport, [Improving air quality in the UK: tackling nitrogen dioxide in our towns and cities – Draft UK Air Quality Action Plan for tackling nitrogen dioxide](#), May 2017
- ⁶ Committee on the Medical Effects of Air Pollutants (COMEAP), [Review of the UK air quality index](#), 22 June 2011
- ⁷ Committee on the Medical Effects of Air Pollutants, [Associations of long-term average nitrogen dioxide with mortality: a report by the Committee on the Medical Effects of Air Pollutants](#), 2018
- ⁸ Public Health England, [Health matters – air pollution](#), 14 November 2018
- ⁹ Scrutiny inquiry evidence session with Dr Ian Mudway, King's College London Environmental Research Group, 14 November 2019
- ¹⁰ Legislation.gov.uk, [The Air Quality Standards Regulations 2010](#)
- ¹¹ Camden Council, [Camden Clean Air Action Plan 2019-2022](#), 2019
- ¹² Air Quality News, [WHO limits for particulate matter will be enshrined in UK law, pledges Gove](#), 16 July 2019
- ¹³ Financial Times, [Britain set to miss 2020 environmental goals](#), 12 November 2019
- ¹⁴ Scrutiny inquiry evidence session with Dr Ian Mudway, King's College London Environmental Research Group, 14 November 2019
- ¹⁵ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ¹⁶ Public Health England, [Health matters – air pollution](#), 14 November 2018
- ¹⁷ Committee on Medical Effects of Air Pollutants (COMEAP), [Long-term exposure to air pollution: effect on mortality](#), 19 June 2009
- ¹⁸ Royal College of Physicians, [Every breath we take: the lifelong impact of air pollution](#), 23 February 2016
- ¹⁹ Philip J Landrigan et al, [The Lancet Commission on pollution and health](#), Volume 391, Issue 10119, 3 February 2018
- ²⁰ Clean Air for Brent, *The air we breathe: presentation to the air quality scrutiny inquiry*, 16 October 2019
- ²¹ Public Health England, [Health matters – air pollution](#), 14 November 2018
- ²² King's College London, [Understanding the health impacts of air pollution in London](#), 14 July 2015
- ²³ Mayor of London, [Pollution and air quality – our air and our vehicles](#), accessed 3 November 2019
- ²⁴ Transport for London, [London's air quality – how bad is it?](#), accessed 3 November 2019
- ²⁵ The Telegraph, [NHS boss announces air pollution emergency as major study shows our dirty air is killing us](#), 21 October 2019
- ²⁶ London Air Quality Network, King's College London, [Is air pollution worse in London?](#), accessed 3 November 2019
- ²⁷ Mayor of London, [London Environment Strategy](#), May 2018
- ²⁸ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ²⁹ London Atmospheric Emissions Inventory, [Annual mean NO2 concentrations](#), 2016
- ³⁰ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry (Report 1)*, 15 August 2019

- ³¹ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ³² Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ³³ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ³⁴ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ³⁵ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ³⁶ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ³⁷ Mayor of London, [Air quality in Brent: a guide for public health professionals](#), November 2012
- ³⁸ Mayor of London, [Air quality in Brent: a guide for public health professionals](#), November 2012
- ³⁹ Mayor of London, [Air quality in Brent: a guide for public health professionals](#), November 2012
- ⁴⁰ Mayor of London, [Air quality in Brent: a guide for public health professionals](#), November 2012
- ⁴¹ London Datastore, [Public Transport Accessibility Levels](#), 2016
- ⁴² Brent Council, [Air Quality Action Plan 2017-2022](#), 2017
- ⁴³ Report to Cabinet from Strategic Director, Community Wellbeing, *Future St Raphael's Masterplan*, November 2019
- ⁴⁴ Ricardo Energy & Environment, [Brent air quality action plan – report 2: Brent AQ assessment and AQMA review](#), 15 July 2016
- ⁴⁵ Brent Council, [Air Quality Action Plan 2017-2022](#), 2017
- ⁴⁶ Ricardo Energy & Environment, [Brent air quality action plan – report 2: Brent AQ assessment and AQMA review](#), 15 July 2016
- ⁴⁷ Ricardo Energy & Environment, [Brent air quality action plan – report 2: Brent AQ assessment and AQMA review](#), 15 July 2016
- ⁴⁸ Brent Council, *Air quality scrutiny inquiry: request for further information*, 25 October 2019
- ⁴⁹ Brent Council, [Air Quality Action Plan 2017-2022](#), 2017
- ⁵⁰ Brent Council, [Air quality: what are the pollutants of concern in my area?](#), accessed 17 November 2019
- ⁵¹ London Air Quality Network, King's College London, [Annual pollution map – 2016](#), accessed 17 November 2019
- ⁵² Scrutiny inquiry meeting with Trade Union Clean Air Network, 7 November 2019
- ⁵³ Camden Council, [Camden Commits to achieve world health organisation guidelines for air quality](#), 2 May 2019
- ⁵⁴ Mayor of London, [London Environment Strategy](#), May 2018
- ⁵⁵ Scrutiny inquiry meeting with Camden Council, 9 September 2019
- ⁵⁶ Scrutiny inquiry meeting with Trade Union Clean Air Network, 7 November 2019
- ⁵⁷ Transport for London, [Roads task force – technical note 12: how many cars are there in London and who owns them?](#), 2011
- ⁵⁸ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ⁵⁹ Transport for London, [Roads task force – technical note 12: how many cars are there in London and who owns them?](#), 2011
- ⁶⁰ Brent Council, [Parking strategy 2015](#), 2015
- ⁶¹ Department for Transport, [Licensed vehicles – type, borough](#), December 2018
- ⁶² Transport for London, [Travel in London, supplementary report: London Travel Demand Survey](#), 2011
- ⁶³ Department for Transport, [Licensed vehicles – type, borough](#), last updated May 2019, accessed 26 November 2019
- ⁶⁴ Wembley National Stadium Limited, *Event day spectator travel plan: version 2.0*, 25 September 2018
- ⁶⁵ Scrutiny inquiry evidence session with the Football Association, 13 November 2019
- ⁶⁶ Wembley National Stadium Limited, *Event day spectator travel plan: version 2.0*, 25 September 2018
- ⁶⁷ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ⁶⁸ City of Westminster, [Report of the air quality task group](#), June 2017
- ⁶⁹ Brent Council, [Parking charges](#), accessed 25 November 2019
- ⁷⁰ Leeds City Council, [Clean air charging zone](#), accessed 18 November 2019

- ⁷¹ Birmingham City Council, [Clean Air Zone](#), accessed 18 November 2019
- ⁷² Transport for London, [Pay a LEZ charge](#), accessed 18 November 2019
- ⁷³ Transport for London, [Changes to the LEZ](#), accessed 18 November 2019
- ⁷⁴ Transport for London, [Ultra Low Emission Zone](#), accessed 18 November 2019
- ⁷⁵ Transport for London, [ULEZ: where and when](#), accessed 18 November 2019
- ⁷⁶ Scrutiny inquiry meeting with Transport for London, 18 November 2019
- ⁷⁷ Clean Air for Brent, *The air we breathe: presentation to the air quality scrutiny inquiry*, 16 October 2019
- ⁷⁸ Clean Air for Brent, *The air we breathe: presentation to the air quality scrutiny inquiry*, 16 October 2019
- ⁷⁹ Transport for London, [Scrappage scheme for vans and minibuses](#), accessed 25 November 2019
- ⁸⁰ Brent Council, *Air quality in Brent: supplementary report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry (Report 4)*, 15 August 2019
- ⁸¹ Brent Council, *Air quality in Brent: supplementary report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry (Report 4)*, 15 August 2019
- ⁸² Imperial College London and Clean Air for Brent, *Getting ready for the extended ULEZ 2021*, 18 March 2019
- ⁸³ Nottingham City Council, [Workplace parking levy](#), 24 November 2019
- ⁸⁴ Brent Council, [Brent's third Local Implementation Plan 2019-2041 \(Draft\)](#), November 2018
- ⁸⁵ Brent Council, [Brent's third Local Implementation Plan 2019-2041 \(Draft\)](#), November 2018
- ⁸⁶ Brent Council, [Brent's third Local Implementation Plan 2019-2041 \(Draft\)](#), November 2018
- ⁸⁷ London Datastore, [Public Transport Accessibility Levels](#), 2016
- ⁸⁸ Living Streets, London Cycling Campaign, London Campaign to Protect Rural England, RoadPeace, Campaign for Better Transport London Group and sustrans, [London Boroughs Healthy Streets Scorecard](#), July 2019
- ⁸⁹ Living Streets, London Cycling Campaign, London Campaign to Protect Rural England, RoadPeace, Campaign for Better Transport London Group and sustrans, [London Boroughs Healthy Streets Scorecard](#), July 2019
- ⁹⁰ Living Streets, London Cycling Campaign, London Campaign to Protect Rural England, RoadPeace, Campaign for Better Transport London Group and sustrans, [London Boroughs Healthy Streets Scorecard](#), July 2019
- ⁹¹ Mayor of London, [Mayor's Transport Strategy](#), March 2018
- ⁹² Brent Council, [Brent's third Local Implementation Plan 2019-2041 \(Draft\)](#), November 2018
- ⁹³ Mayor of London, [Green light for development of six new cycle routes across London](#), 30 January 2018
- ⁹⁴ Brent Council, [Brent wins gold for cycling and walking](#), 7 May 2019
- ⁹⁵ Mayor of London, [Healthy streets for London: prioritising walking, cycling and public transport to create a healthy city](#), February 2017
- ⁹⁶ Brent Council, [Brent wins gold for cycling and walking](#), 7 May 2019
- ⁹⁷ Brent Council, [West London Orbital strategic outline business case](#), 18 November 2019
- ⁹⁸ Brent Council, [Brent's third Local Implementation Plan 2019-2041](#), November 2018
- ⁹⁹ Scrutiny inquiry meeting with Transport for London, 18 November 2019
- ¹⁰⁰ Transport for London, [Improving buses](#), accessed 10 November 2019
- ¹⁰¹ Mayor of London, [Green transport](#), 10 November 2019
- ¹⁰² Brent Council, [Brent's third Local Implementation Plan 2019-2041](#), November 2018
- ¹⁰³ Mayor of London, [Green transport](#), 10 November 2019
- ¹⁰⁴ Brent Council, [Brent's third Local Implementation Plan 2019-2041 \(Draft\)](#), November 2018
- ¹⁰⁵ Scrutiny inquiry evidence session with Transport for London, 16 October 2019
- ¹⁰⁶ Scrutiny inquiry evidence session with Transport for London, 16 October 2019
- ¹⁰⁷ Brent Council, [Brent's third Local Implementation Plan 2019-2041 \(Draft\)](#), November 2018
- ¹⁰⁸ Scrutiny inquiry evidence session with Waltham Forest Council, 11 November 2019
- ¹⁰⁹ Scrutiny inquiry evidence session with Brent Cycling Campaign and London Cycling Campaign, 1 October 2019
- ¹¹⁰ Brent Council, [Brent cycle strategy 2016-2021](#), 2016
- ¹¹¹ Mayor of London, [Indoor air quality report](#), 23 May 2018
- ¹¹² The Guardian, [Restaurants' contribution to air pollution revealed](#), 10 October 2019
- ¹¹³ British Lung Foundation, [What causes poor indoor air quality?](#), accessed 11 November 2019
- ¹¹⁴ British Lung Foundation, [What causes poor indoor air quality?](#), accessed 11 November 2019
- ¹¹⁵ British Lung Foundation, [What causes poor indoor air quality?](#), accessed 11 November 2019
- ¹¹⁶ British Lung Foundation, [What causes poor indoor air quality?](#), accessed 11 November 2019
- ¹¹⁷ Institute of Air Quality Management, [Guidance on the assessment of the impacts of construction on air quality and the determination of their significance](#), December 2011
- ¹¹⁸ Institute of Civil Engineers Air Quality Taskforce, [Engineering cleaner air: a report into civil engineering solutions to London's air pollution](#), October 2017

- ¹¹⁹ Scrutiny inquiry evidence session with Dr Ian Mudway, King's College London Environmental Research Group, 14 November 2019
- ¹²⁰ Mayor of London, [The draft London Plan](#), July 2019
- ¹²¹ Mayor of London, [Control of dust and emissions](#), accessed 11 November 2019
- ¹²² Mayor of London, [Appendix 6.3: Air quality neutral assessment](#), accessed 11 November 2019
- ¹²³ Scrutiny inquiry evidence session with Brent Council and Ace Café Wembley, 15 August 2019
- ¹²⁴ Brent Council, [Air quality action plan 2017-2022](#), 2017
- ¹²⁵ Brent Council, [Local Plan: regulation 19 consultation](#), 2019
- ¹²⁶ Brent Council, [Air quality and construction](#), accessed 11 November 2019
- ¹²⁷ Brent Council, [Industrial pollution control](#), accessed 11 November 2019
- ¹²⁸ Brent Council, [Air quality action plan 2017-2022](#), 2017
- ¹²⁹ Scrutiny inquiry evidence session with Brent Council and Ace Café Wembley, 15 August 2019
- ¹³⁰ Brent Council, [Air quality action plan 2017-2022](#), 2017
- ¹³¹ Scrutiny inquiry meeting with Camden Council, 9 September 2019
- ¹³² Scrutiny inquiry meeting with Trade Union Clean Air Network, 7 November 2019
- ¹³³ London Borough of Croydon, [Croydon healthy homes](#), accessed 24 November 2019
- ¹³⁴ British Lung Foundation, [How does air pollution affect children's lungs](#), accessed 24 November 2019
- ¹³⁵ Transport for London, [London's air quality – how bad is it?](#), accessed 3 November 2019
- ¹³⁶ University College London and University of Cambridge, [Indoor air quality in London's schools](#), May 2018
- ¹³⁷ Mayor of London, [The Mayor of London's School Air Quality Audit Programme: John Keble Church of England Primary School, London Borough of Brent](#), May 2018
- ¹³⁸ Mayor of London, [The Mayor of London's School Air Quality Audit Programme: Ark Franklin Primary Academy, London Borough of Brent](#), May 2018
- ¹³⁹ Scrutiny inquiry evidence session with Clean Air for Brent, 16 October 2019
- ¹⁴⁰ London Road Safety Council, [New scheme to curb school-run congestion in Brent](#), 24 July 2019
- ¹⁴¹ Brent Council, [School travel plans](#), accessed 20 November 2019
- ¹⁴² London Borough of Haringey, [Draft third Local Implementation Plan 2019-2022](#), November 2018
- ¹⁴³ King's College London Environmental Research Group, [The impact of a green screen on concentrations of nitrogen dioxide at Bowes Primary School, Enfield](#), January 2018
- ¹⁴⁴ Scrutiny inquiry evidence session with National Education Union, 19 November 2019
- ¹⁴⁵ Brent Council, *Air quality in Brent: report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry*, 15 August 2019
- ¹⁴⁶ Public Health England, [Pollution alerts and notifications](#), accessed 24 November 2019
- ¹⁴⁷ London Air Quality Network, [Air pollution now](#), accessed 24 November 2019
- ¹⁴⁸ AirText, [Air quality maps](#), accessed 24 November 2019
- ¹⁴⁹ Brent Council, [AirText](#), accessed 24 November 2019
- ¹⁵⁰ London Air Quality Network, [London Air iPhone app](#), accessed 24 November 2019
- ¹⁵¹ The Guardian, [London air pollution: which mode of transport has the highest exposure?](#), 12 August 2014
- ¹⁵² Newcastle Upon Tyne Hospitals NHS Foundation Trust, [Newcastle hospitals declare climate emergency](#), 28 June 2019 and Greater Manchester Health and Social Care Partnership, [NHS in Greater Manchester declares a climate emergency](#), 29 August 2019
- ¹⁵³ Brent Council, *Air quality in Brent: supplementary report from the Strategic Director of Regeneration and Environment for the Air Quality Scrutiny Inquiry (Report 4)*, 15 August 2019
- ¹⁵⁴ Brent Council, [School travel plans](#), accessed 20 November 2019

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