LONDON BOROUGH OF HAMMERSMITH & FULHAM

Report to: Cabinet

Date: 10/10/2022

Subject: Boroughwide Clean Air Neighbourhoods Programme

Report of: Councillor Ben Coleman - Deputy Leader of the Council and responsible for Health and Social Care,
Councillor Sharon Holder - Cabinet Member for Public Realm,
Councillor Wesley Harcourt – Cabinet Member for Climate Change and Ecology

Report Author: Dr Nicola Lang – Director of Public Health
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Responsible Director: Bram Kainth – Strategic Director of Environment

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SUMMARY

This report seeks an outline approval for the implementation of an ambitious, borough-wide programme of Clean Air Neighbourhoods.

At its heart, a Clean Air Neighbourhood is a comprehensive Public Health initiative with the ambition of reducing many of the impacts of poor air quality and improving the health of residents.

According to Public Health England (PHE), poor air quality is the largest environmental risk to public health in the UK. Long term exposure to man-made air pollution in the UK has an estimated annual effect equivalent to 28,000-36,000 deaths. Air pollution can lead to a variety of health problems, including cardiovascular disease and lung cancer.

In addition, a recent study by the Committee on the Medical Effects of Air Pollutants concluded there is evidence to suggest an association between ambient air pollutants and an acceleration of the decline in cognitive function often associated with ageing, and with the risk of developing dementia.

Many recent national and international studies have evidenced the increasingly negative impact of poor air quality on the lungs, brains and general health of residents.

Road vehicles are the single biggest cause of poor air quality in London. They produce nearly 50% of all harmful nitrogen oxide pollution and emit particles too small to see with the naked eye into the air we breathe.

The Clean Air Neighbourhoods programme will seek to improve the health of residents through a range of measures and public realm area improvements, including new trees, greening, sustainable drainage systems, pedestrian safety improvements, cycling facilities and traffic access restrictions. It will repurpose street space to be used by the community for play streets, community theatre and resident-led events such as street parties. As part of the broader effort to improve air quality, further measures to tackle energy use and heating demand will also be brought forward

An experimental programme of traffic restrictions will play a key role in achieving Clean Air Neighbourhoods by discouraging out-of-borough traffic from adding to air pollution by using our

streets simply to pass through the borough rather than, for example, visit friends or family or make deliveries.

The Clean Air Neighbourhood programme will play an important role in achieving Council priorities arising out of the administration's manifesto (as shown in Appendix 3), with 26 direct links and 15 indirect links.

This report details the programme and how it will be developed with residents, setting out engagement, monitoring and risks.

RECOMMENDATIONS

1. To approve the borough wide programme of Clean Air Neighbourhoods within the London Borough of Hammersmith & Fulham (Appendix 1).

2. To delegate responsibility to the Strategic Director of Environment for decision-making and defining the parameters of the Clean Air Neighbourhood programme in consultation with the Deputy Leader of the Council, Cabinet Member for Public Realm and Cabinet Member for Climate Change and Ecology.

3. To delegate responsibility to the Strategic Director of Environment to amend or modify the programme in consultation with the Deputy Leader of the Council, Cabinet Member for Public Realm and Cabinet Member for Climate Change and Ecology.

4. To delegate responsibility to the Strategic Director of Environment for implementing projects to clean the air and enhance the public realm in consultation with the Deputy Leader of the Council, Cabinet Member for Public Realm and Cabinet Member for Climate Change and Ecology.

5. To delegate responsibility to the Strategic Director of Environment to approve the making of Experimental Traffic Orders for the purpose of implementing the experimental phase of the Clean Air Neighbourhoods in consultation with the Deputy Leader of the Council, Cabinet Member for Public Realm and Cabinet Member for Climate Change and Ecology.

6. To delegate responsibility to the Strategic Director of Environment to approve the making permanent of any Experimental Traffic Orders for the purpose of implementing Clean Air Neighbourhoods subject to the outcomes of public engagement, data collection, monitoring, and analysis, in consultation with the Deputy Leader of the Council, Cabinet Member for Public Realm and Cabinet Member for Climate Change and Ecology.

Wards Affected: All

Our Values	**Summary of how this report aligns to the H&F Values**
Building shared prosperity	All residents will benefit from this proposal, as it is intended to cover all wards and neighbourhoods, not just a select few.
Creating a compassionate council	All residents across the Borough deserve the same opportunities to live in healthy and happy neighbourhoods.
Doing things with residents, not to them	Resident engagement is a key feature of the Clean

	Air Neighbourhood programme. Local knowledge will be invaluable in co-designing the projects.
Being ruthlessly financially efficient	Increasing the health outcomes of our residents is a worthwhile investment.
Taking pride in H&F	A whole-of-Borough approach is as innovative as it is ambitious.
Rising to the challenge of the climate and ecological emergency	Whilst the health of residents is the primary driver of this proposal, the programme will also go a long way to meeting the Council's climate and ecological emergency commitments.

Financial Impact

The introduction of the Clean Air Neighbourhood programme is expected to lead to significant non-financial benefits, including improved health and well-being, general safety of road users and the environment. It is hoped over the medium and long term that this will result in reduced financial pressure on public health, social care and the NHS.

The potential behavioural matters are complex and uncertain and therefore it is not prudent or indeed possible to assess the potential financial implications at this early stage of the policy. Any investment that will be required to implement the programme will be considered separately as the projects are developed and all these costs will be reported through the Environment Department budget and as part of the established annual and in-year financial reporting and monitoring frameworks.

Kellie Gooch, Head of Finance (Environment), 19 August 2022
Implications verified by Sukvinder Kalsi, Director of Finance, 19 August 2022

Legal Implications

- Clean Air Neighbourhood experimental schemes will be launched using Experimental Traffic Order/s under the Road Traffic Regulation Act 1984.
- Consideration will be given to whether to make the Experimental orders permanent under the 1984 Act

Poonam Rajput, Senior Solicitor, 26 August 2022

Background Papers Used in Preparing This Report

None

DETAILED ANALYSIS

Public Health

1. According to Public Health England (PHE), poor air quality is the largest environmental risk to public health in the UK. Long term exposure to man-made air pollution in the UK has an estimated annual effect equivalent to 28,000-36,000 deaths. Air pollution can lead to a variety of health problems including cardiovascular disease and lung cancer.[1]

2. Several expert sources have published findings into the impact of air pollution on health.

   - The Government Office for Science has reported that "traffic-related air pollution is associated with worse pregnancy outcomes and the risk of death and exacerbation of asthma and chronic chest illnesses in children".[2]

   - PHE says that people at higher risk of negative health impact due to air pollution include older people (65 years and older), children, people with cardiovascular (heart) disease and/ or respiratory (lung) disease, pregnant women, communities in areas of poor air quality, and poorer communities.[3]

   - The Committee on the Medical Effects of Air Pollutants (COMEAP) concluded in July that there is evidence to suggest an association between ambient air pollutants and an acceleration of the decline in cognitive function often associated with ageing, and with the risk of developing dementia.[4]

   - Imperial College's environmental research group has highlighted the clear links between poverty and air pollution, which are already recognised by H&F Council's Air Quality Action Plan. Imperial College says "clean air campaigners and advocates have noticed that the same geographical communities being affected by COVID-19 and inequity are also the ones showing a greater propensity to being impacted by pollution and poor air quality. Those living in areas of high deprivation show a greater vulnerability, which is especially pronounced amongst the BAME residents within these deprived communities".[5]

3. PHE has also note that "In 2010, the Environment Audit Committee considered that the cost of health impacts of air pollution was likely to exceed estimates of £8 to 20 billion".[6]

4. Current dispersion modelling by the London Atmospheric Emissions Inventory of the annual mean concentrations across Hammersmith & Fulham of the air pollutants nitrogen dioxide (NO2) and fine particulate matter (PM2.5) indicates that the majority of residential areas, schools, hospitals and care homes are located in areas of the borough in which there are exceedances of the annual mean World Health Organisation air quality guideline values for NO2 of 10 ug/.m-3 and for PM2.5 of 5ug/m-3. [7] (See Appendix 4).

5. In September 2021 WHO updated their guidelines for the first time since 2005. Guidelines for PM10, PM2.5, and nitrogen dioxide were substantially reduced from their previous levels. The table below compares these with the mean UK limits.

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[1] H&F air pollution factsheet (lbhf.gov.uk)
[2] Future of mobility: inequalities in mobility and access in the UK Transport System (publishing.service.gov.uk)
[3] H&F air pollution factsheet (lbhf.gov.uk)
[4] Cognitive decline, dementia and air pollution: A report by the Committee on the Medical Effects of Air Pollutants (publishing.service.gov.uk)
[5] Pollution and Poverty (imperial.ac.uk)
[6] Health matters: air pollution - GOV.UK (www.gov.uk) last accessed 18.8.22
[7] LAEI 2019 - Borough Air Quality Data for LLAQM - London Datastore

Annual mean UK limits against the WHO guidelines

Pollutant	UK Limit Value (ug/m-3)	WHO guideline (ug/m-3)	Averaging period
Nitrogen Dioxide (N02)	40	10	Annual
PM2.5 Particulates	25	5	Annual
PM10 Particulates	40	15	Annual

Clean Air Neighbourhood

6. At its heart, a Clean Air Neighbourhood is a comprehensive Public Health initiative with the ambition of reducing many of the impacts of poor air quality and improving the health of residents.

7. During the first phase of developing Clean Air Neighbourhoods, the Council will seek to make many neighbourhood-level public realm improvements, including but not limited to:

    - Introduction of additional street trees and greening with native species to encourage biodiversity
    - Flood mitigation measures
    - Parklets / pocket parks
    - Reducing the impact of out-of-borough traffic (initially on an experimental basis)
    - Reducing the air quality impact of PM2.5 emissions from wood burning stoves
    - Localised walking and cycling improvements
    - Tackling energy and heating demand.

8. Road vehicles using non-renewable fuel are the single biggest cause of London's nitrogen oxide air pollution. They produce nearly 50% of all nitrogen oxides and emit tiny particles of rubber and metal (PM10, PM2.5) - too small to see with the naked eye - into the air we breathe.

9. Road traffic and many issues related to high traffic volumes, such as congestion and pollution, have been a long-standing concern amongst H&F residents and the wider community.

10. The successful implementation of Clean Air Neighbourhoods will rely on ongoing open and transparent engagement with residents, significant data collection and the delivery of successful public realm improvements.

South Fulham Clean Air Neighbourhood

11. A previous traffic, congestion and pollution reduction scheme launched in the South Fulham (east) residential area has helped to inform the development of the Clean Air Neighbourhood proposal.

12. Numerous public realm improvements have been developed alongside the scheme in collaboration with resident groups.

13. Data obtained during this scheme have demonstrated a significant improvement in air quality and reduction in total traffic volumes across the area.

    - Air quality on residential streets previously used as through-routes has improved and an associated improvement in air quality across the whole area has been observed.

- Across whole South Fulham as a whole, traffic has reduced by approximately 23 per cent since the scheme's launch in July 2020. This equates to bringing down the number of trips by motorists by 8,000 per day and has contributed significantly to the removal of at least one tonne of CO2 per day from the area.

- Traffic has also reduced by 75 per cent on local streets in the east and by 12 per cent on Wandsworth Bridge Road.

14. A decision to make the experimental South Fulham (east) scheme permanent and subsequently launch an experimental traffic, congestion and pollution reduction scheme in the South Fulham (west) area was taken at a Cabinet meeting held in December 2021, and officers were given delegated authority to proceed.

15. The Clean Air Neighbourhoods programme is thus an evolution of the South Fulham traffic, congestion and pollution reduction scheme with the aim of tackling public health and air quality. The experimental South Fulham (west) scheme will contain a wider range of public realm measures as set out above.

Project Development Approach

16. Roads in Hammersmith & Fulham have long suffered from high volumes of traffic, with studies estimating that approximately 85 per cent of traffic volumes on local streets is due to vehicles passing right through the borough. These trips take place without stopping to visit homes, make deliveries or access shops, services or facilities in the borough.

17. This through-traffic is acknowledged to be a primary cause of the borough's poor air quality. To address this, the Council has developed an outline programme for experimenting with Clean Air Neighbourhood projects which builds on the successful pilot project in South Fulham (east) to improve air quality and the health of our residents across the whole borough.

18. The traffic-limiting element of this will operate via Experimental Traffic Orders, which will restrict traffic emanating outside the borough from using streets within the Clean Air Neighbourhoods. These restrictions will not apply to residents but only to those from outside the borough. "Smart" cameras will be used to identify resident and non-resident vehicles through number plate recognition technology. It is expected that the introduction of these measures will lead to a permanent reduction in traffic volumes and the opportunity to make lasting public realm improvements.

19. H&F residents and key "permitted vehicles", such as buses, taxis, emergency services, and waste vehicles, will be unaffected by the access restrictions and will be able to pass through the cameras and move around the area without incurring a penalty. We will work with navigation tool providers to ensure delivery and licensed passenger services will be correctly routed within the neighbourhoods.

School Streets Plus Development Approach

20. The Council has investigated the application of school streets across London. Whilst there are clear benefits to individual school streets, the possible displacement needs to be considered, as do the parking impacts on neighbouring roads caused by many parents and carers still endeavouring to drive children to locations as close to the school as they can.

21. For each possible school location, context and area are key. All factors need to be considered, along with the appropriateness of further measures after the bedding-in period usual for any experimental traffic management project.

22. By implementing a Clean Air Neighbourhood programme, the Council can improve air quality across the borough while tackling traffic concerns and volumes. These improvements can be enhanced by further measures to be considered.

23. The Council has carried out eleven school air quality audits and engaged with the schools on enhancing the public realm and assisting in reducing the carbon footprint from school operations. The council will continue working with schools to undertake air quality audits and implement the recommendations arising from these.

24. Further measures can include extensive awareness and events campaigns, further traffic calming, and provision of more street or dwell furniture, greening, trees and parklets, along with Sustainable Urban Drainage Systems, wider pavements, safer crossing facilities and targeted air quality improvement pilots and trials.

25. The Council will also investigate installing air purifiers and green vegetation barriers around external playgrounds, following positive results in pilot studies at three London schools conducted by the Global Centre for Clean Air Research, University of Surrey.

26. Schools will be provided with extensive support with events such as playstreets, street parties and themed street theatre, in addition to further awareness, cycling, walking and scooter safety training, plus personalised travel planning and travel action planning to help schools encourage more sustainable travel behaviour by parents.

Main Road Management

27. The Clean Air Neighbourhood projects is principally intended to remove the majority of out-of-borough vehicle traffic from local residential streets but we expect it to improve the air across the area and benefit all roads over time.

28. After a bedding-in period which may see a potential increase in traffic on boundary roads, a possible extension of peak times and some displacement from the wider area, overall traffic volumes are expected to settle over time.

29. The Council will explore all possible steps to ensure that all residents benefit from the Clean Air Neighbourhood programme, including those who live on boundary roads. We will introduce a range of measures that we expect will lead to an overall improvement in air quality and reduction in traffic on all main roads across the borough.

30. Measures under consideration would include:

- Introduction of bus priority lanes
- Widened footpaths
- Cycling infrastructure
- Trees and greening
- Integrating sustainable drainage and flood mitigation.

Reasons for Decision

31. The aim of the Clean Air Neighbourhoods is to improve local air quality by undertaking a series of steps which include achieving a significant reduction in total traffic volumes. The major routes through Hammersmith and Fulham continue to be blighted by high volumes of

commuter traffic passing through without stopping. More and more people rely on SatNavs, such as Google Maps and Waze, which encourage motorists to drive through our residential roads.

32. The Clean Air Neighbourhood projects will make significant progress towards achieving the Council's policy agenda for Public Health and the Climate Emergency, and the Council's priorities, with 26 direct links and 15 non direct links (see Appendix 3).

33. Working with resident groups and engaging the wider community on project development proposals helps the Council to build a better understanding of local issues and proposals and design tailored and specific projects to best address the concerns of local communities.

34. The projects can be amended, altered or abandoned without significant capital investment on infrastructure or making permanent changes to the road network.

35. The collection of real-time data during the project will inform decision making. Any future recommendation to make a project permanent or to abandon a project will need to be based on data and feedback collected during the project.

Equality Implications

36. At this stage, the Council is considering solely whether to approve the outline programme. As the specific schemes are developed in greater detail, further consideration will be given to the potential equalities impacts and a specific EQIA will be carried out for each Experimental Traffic Order. The equalities impact of each scheme will be further monitored and assessed following the implementation of the experimental orders and considering the consultation that will take place at that stage before any decision as to whether any of the schemes should be made permanent is taken (Appendix 5).

Climate and Ecological Emergency Implications

37. Clean Air Neighbourhood projects are likely to contribute positively to achieving Climate Change targets by significantly reducing total traffic volumes and carbon emissions in an area.

38. The existing South Fulham (east) scheme is considered to have made a significant positive contribution towards tackling the Climate and Ecological Emergency due to improvements in air quality following a demonstrable reduction in traffic volumes. By making this scheme permanent, the Council has ensured the positive contributions are maintained and contributed to the realisation of the longer-term aspiration of reallocating road space for greening, biodiversity and flood alleviation measures.

39. As noted above, across whole South Fulham as a whole, traffic has reduced by approximately 23 per cent since the scheme's launch in July 2020. This equates to bringing down the number of trips by motorists by 8,000 per day and has contributed significantly to the removal of at least one tonne of CO2 per day from the area. We would expect to see similar benefits across all of these new Clean Air Neighbourhoods.

40. Depending on the outcome of the experimental phase, projects could lead to permanent projects being introduced in the borough to achieve long term improvements to air quality by reducing vehicle emissions.

Implications verified by Hinesh Mehta, Head of Climate Change, 15 August 2022

Risk Management Implications

41. The report sets out that poor air quality is the largest environmental risk to public health in the UK, with exposure to man-made air pollution estimated to lead to 28,000-36,000 deaths annually, as well as to a variety of health problems including cardiovascular disease and lung cancer. The report notes an Office for Government Science report which states that "traffic-related air pollution is associated with worse pregnancy outcomes and the risk of death and exacerbation of asthma and chronic chest illnesses in children". In addition, research carried out by Imperial College highlights the clear links between poverty and air pollution.

42. The report recommends approval of a significant investment to tackle these issues, with a number of proposed actions to be carried out at pace. These actions are intended to tackle the risks to residents, particularly those who are vulnerable.

43. Officers will need to review the impact of the Experimental Traffic Orders and other measures to ensure they secure improvements in air quality, as well as considering any unintended consequences on other local areas within the borough (whether this be residents or local businesses). This will enable the Council to make best use of the investment and maximise the benefits for residents' health.

David Hughes, Director of Audit, Fraud, Risk and Insurance, 15 August 2022

Coproduction, Engagement and Monitoring

44. The Council believes in undertaking open and genuine engagement with residents and stakeholders regarding any changes within the borough. Local community groups will be invited to provide input into the development of proposals. Officers will seek out community insights and issues from residents' associations in targeted areas prior to the launch of experimental schemes. This has already begun in South Fulham (west) and Brackenbury.

45. The Clean Air Neighbourhoods will be introduced as a series of experimental projects, implemented by way of Experimental Traffic Orders, so as to ensure public engagement takes place during the experimental phase of the project.

46. It is expected to take three to six months to work through initial project details, working with resident groups and building a shared understanding of project parameters over several meetings.

47. It can take upwards of three months from project launch for the initial peak in contraventions for camera enforced projects to settle and up to six months for a project to settle and achieve the traffic reduction levels expected, with related improvements in air quality. This period is also key in ensuring residents develop an understanding of the project.

48. The Council will follow all statutory requirements and guidance required for the making, implementation, consultation and monitoring of Experimental Traffic Orders.

49. Experimental projects can run for up to 18 months by law. During this period, the project team will collect data and feedback received as part of the consultation and analyse the results, followed by a report on findings and recommendations for each project.

50. During the experimental period, the project team will continue to work with key stakeholders including residents and businesses in each area to refine the project as appropriate.

51. As a result of the consultation exercises undertaken during the South Fulham (east) pilot project and by listening to residents' views, the Council made the following improvements:

- Increased ease of access for visitors and required services
- Working with local businesses to ensure they can still undertake business needs
- Improving communication between Council and SatNav providers
- Enhanced and clearer signage
- Improved use and understanding of RingGo and access processes

52. The Council will undertake significant traffic and air quality data collection to help inform discussions and interventions. Officers will continue to collect, monitor, and report on these metrics throughout the trial period.

LIST OF APPENDICES

Appendix 1 – Delivery programme and key dates
Appendix 2 – Clean Air Neighbourhoods map
Appendix 3 – Alignment with Council commitments
Appendix 4 – Hammersmith & Fulham Air Pollutant Concentration Maps
Appendix 5 – Equalities Impact Assessment

Appendix 1 – Delivery Programme and Key Dates

The below table sets out a high-level outline of the proposed timeline for implementation on an area-by-area basis. These areas are loosely based up to the borough plan in Appendix 2.

As we are setting an ambitious target of delivering this programme across the whole borough in under two years, we will also act on a range of local factors including but not limited to resident demand for areas of air quality, traffic monitoring and resident engagement.

Indicative programme

Phase	Area	Proposed implementation date of Clean Air Neighbourhood
1	• **South Fulham (east and west)** • **Brackenbury**	**November 2022**
2	• **Barons Court** • **Brook Green**	**April 2023**
3	• **Cathnor Park** • **Caxton Village** • **Hammersmith TC** • **North End Road** • **Ravenscourt Park** • **Riverwalk** • **Wendell Park** • **White City** • **Wormholt Park** • **Wormwood Scrubs**	**June 2023 – July 2024**

Programme Notes

- There will an approximately nine-month process to begin traffic monitoring, develop schemes and implement the experimental phase of a project.
- Three months after implementation of a Clean Air Neighbourhood, the need for a school street will be assessed and actioned
- Experimental Traffic Order trials can last between 6 and 18 months before a decision must be taken by law.

- Monitoring and engagement with residents and councillors will continue throughout the process.

- We will ideally seek to introduce public realm improvements, main road treatments and other neighbourhood enhancements in parallel, subject to funding.