

Item No. 7.	Classification: Open	Date: 26 July 2016	Meeting Name: Health and Wellbeing Board
Report title:		The Health Impact of Air Quality in Southwark	
Ward(s) or groups affected:		Electoral ward(s): All	
From:		David Littleton – Head of Regulatory Services	

RECOMMENDATION(S)

1. The board is requested to note this report and consider the impact of poor air quality on public health and consider making it a local public health priority.
2. That the board note that the draft Air Quality Action plan will be shared with the Board in October, the plan will include tangible costs of the measures.

EXECUTIVE SUMMARY

3. This report gives the background to the health impact of poor air quality and why the improvement of air quality should be a local priority for the Local Authority and Clinical Commissioning Groups.
4. The local authority is required by statute to regularly review air quality in its area and to check if it complies with objectives set out in the National Air Quality Strategy and Air Quality Regulations. In parts of Southwark the pollutants Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀) are non-compliant with current air quality limits. It has been estimated that these two pollutants cause approximately 9,500 premature deaths in London per annum.
5. The new London Mayor has included air quality in his top 10 priorities for London. His aim is restore London's air quality to legal and safe levels, with action to make travel greener and pedestrianise Oxford Street, while protecting the green belt. On the 5th July 2016 the Mayor of London launched a consultation on a tough action plan to improve the air quality in the London.
6. An individual's health is influenced by many factors that may be personal, societal or environmental. Poor air quality is an environmental factor that has a measureable impact across exposed populations. The degree of personal impact depends on an individual's exposure to atmospheric pollutants and their underlying vulnerability or predisposition to those impacts manifesting as a chronic or acute health event, further details of the impact can be found in Appendix 1.
7. The sources of air pollution in Southwark and the pollutants from these sources are listed in Appendix 1. Details are provided in respect of the local air quality with maps to illustrate a) the most recent modeled pollutant concentrations for the Borough and b) the Nitrogen Dioxide concentrations across the Greater London area to show the extent of the issue of exceedence of air quality limits in the capital.

8. The London Local Air Quality Management Framework and the relationship between air quality and the public health outcomes framework is explained on page 10 of this report.
9. The report concludes with details on the progress of the Southwark Air Quality Action Plan review
10. The criteria for the borough to become a Cleaner Air For London Borough and have access to the Mayor's Air Quality Fund is provided in Appendix 3

BACKGROUND INFORMATION

11. The Environment Act 1995 requires that each local authority regularly reviews air quality in its district and assesses whether a range of air quality standards and health based objectives, established by the National Air Quality Strategy and translated into The Air Quality (England & Wales) Regulations 2010, are being achieved.
12. Where a local authority identifies that the pollutant objective limits will not be achieved by the target dates set within the regulations, the authority must declare that area an Air Quality Management Area (AQMA). It must also prepare an Air Quality Action Plan (AQAP) that sets out the measures the authority intends to take to reduce pollutants and achieve the air quality objective limits.
13. The council's current priorities, as set out in the Southwark Air Quality Strategy 2012 – 2017, are for improvements in Nitrogen Dioxide (NO₂), small particulate matter (PM₁₀) and fine particulate matter (PM_{2.5}).

KEY ISSUES FOR CONSIDERATION

Policy implications

14. The council has a duty under Part IV of the Environment Act 1990 to assess and review air quality within its area and work towards meeting the air quality objectives contained in The Air Quality (England & Wales) Regulations 2010 to protect the public health of all visitors and residents to the Borough.

Community impact statement

15. All areas of the borough are affected by poor air quality, but not all areas or people are affected equally. Poor air quality has a significant impact on health, with approximately 9,500 premature deaths in London each year attributed to it.
16. There is a complex link between air quality and inequality in London. In general, more deprived areas are likely to experience higher levels of pollution, although there is considerable local variation. The link between inequality and poor air quality is stronger in Outer London than in Inner London where there are high levels of pollution across the board.
17. Fine particles have the greatest impact on health as they can reach the bloodstream through the lungs. Young children and the elderly are the most susceptible to the effects.

Resource implications

18. The resource for managing the air quality review and assessment process for the Borough is currently within the Regulatory Services budget. Resourcing for many of the measures in the Air Quality Action Plan are within the budgets of the services delivering the actions for which they have responsibility. However, it is a challenge to introduce actions and measures that will together deliver the required reduction in emissions to ensure the air quality objective limits will eventually be met. This is due to the complexity of the interactions of cost, emissions improvements (effect) and the behavior change/habit breaking required to achieve this.

Legal implications

19. The Environment Act 1995 requires that each local authority regularly reviews air quality in its district and assesses whether a range of air quality standards and health based objectives, as established by the National Air Quality Strategy and translated into The Air Quality (England & Wales) Regulations 2010, are being achieved. The Air Quality (England) Regulations 2000, as amended by the Air Quality (England) (Amendment) Regulations 2002, provide the statutory basis for the air quality objectives under Local Air Quality Management framework in England.
20. Where a local authority identifies that these objectives will not be achieved by the target dates set within the regulations, the authority must declare the area an air quality management area (AQMA). It must also prepare a supporting air quality action plan (AQAP) which sets out the measures the authority intends to put into place to achieve the air quality objectives.
21. In February 2014, the European Commission sent a letter of formal notice to the UK government advising that the UK is in breach of its obligations under the Directive on ambient air quality and cleaner air in Europe. This is the early stage of the infraction process. Under the provisions of the Localism Act 2011 the UK government can, and has made clear it is their intention to, pass any fines they receive from the EC down to regional and Local Authorities, after due process has taken place.
22. Now as the UK prepares to leave the EU, at present there is no clear picture whether the air quality legislation will be retained, strengthened, weakened or scrapped.

Financial implications

23. There are no financial implications contained within this report.

Consultation

24. This report has been consulted with the Director of Public Health and their comments have been incorporated into the report.
25. There has been no other departmental consultation.

SUPPLEMENTARY ADVICE FROM OTHER OFFICERS

Director of Law and Democracy

26. That the Health and Wellbeing Board note the impact of poor air quality on public health and consider making it a local public health priority.

Strategic Director of Finance and Governance

27. This report is requesting the Health and Wellbeing Board to note this report and consider the impact of poor air quality on public health and consider making it a local public health priority.
28. The strategic director of finance and governance notes that there are no immediate financial implications arising from this report and any cost implications emerging from the Air Quality Action plan will be subject to separate report for formal approval.
29. Staffing and any other costs connected with this report to be contained within existing departmental revenue budgets.

APPENDICES

No.	Title
Appendix 1	Health and Wellbeing Board & Air Quality
Appendix 2	GLA / London Borough of Southwark Concentration Maps
Appendix 3	Air Quality Exemplar Qualifying Criteria
Appendix 4	Public Health Outcome Framework

AUDIT TRAIL

Lead Officer	David Littleton – Head of Regulatory Services	
Report Authors	Sarah Newman / Bill Legassick	
Version	Final	
Dated	14 July 2016	
Key Decision?	No	
CONSULTATION WITH OTHER OFFICERS / DIRECTORATES / CABINET MEMBER		
Officer Title	Comments Sought	Comments Included
Director of Law and Democracy	Yes	Yes
Strategic Director of Finance and Governance	Yes	Yes
Public Health Director	Yes	Yes
Cabinet Member	Yes	No
Date final report sent to Constitutional Team / Community Council / Scrutiny Team	14 July 2016	

Appendix 1

Health and Wellbeing Board & Air Quality

Impact of poor air quality on public health

The World Health Organization recently estimated that 12.6 million people died as a result of living or working in unhealthy environment in 2012. Of these deaths, 8.2 million deaths were assessed to have been caused by environmentally non-communicable disease and were primarily linked to air pollution¹. Kings College London has estimated that approximately 9,500 deaths per annum occur due to long-term exposure of particle matter and Nitrogen Dioxide² in London.

An individual's health is influenced by many different determinants including social and environmental factors, see Figure 1. Air quality is one of several environmental factors that have an impact on health. The degree of impact depends on the individual's exposure to pollutants.

Figure 2 demonstrates the severity of the health impact with the majority of the population shown as the base of the pyramid and as the severity of the health effect increases up the pyramid, the population decreases.

Poor air quality exacerbates asthma, causes cancer, heart attacks and causes low birth weight.³ The 'Exhale Project' in east London has found that young children exposed to urban air pollution have their lung capacity permanently reduced by 5% to 10%, this result is also repeated by a study in Leicester³. Studies found that poor air quality causes stress on the immune system³. This can lead to loss of quality of life, longer recovery times from acute health events and premature deaths.

It has been found that after several days after a poor air quality episode there is spike in admissions to accident and emergency departments of hospitals in a similar pattern to that which follows extreme temperature weather events⁴.

Air Pollution Sources

Poor air quality in London is almost exclusively due to human activity and is caused by emissions from road traffic, industrial, commercial and domestic sources. Intensive agriculture also causes air pollution but this source does not impact locally in Southwark. There are some natural causes of air pollution such as marshes, forest fires and volcanoes but these are dwarfed by the sources of emissions due to human activity.

Traffic – Vehicle exhaust fumes are the main cause of air pollution in Southwark. We have several arterial routes and major roads that have heavy traffic flows both to and from central London. Cleaner fuels, catalytic converters and particulate filters all help to reduce emissions

¹ WHO (2016) Preventing disease through healthy environments; a global assessment of the burden of disease from environmental risks (March 2016) ISBN 978 92 4 156519 6 accessed at http://www.who.int/quantifying_ehimpacts/publications/preventing-disease/en/

² Kings College (2015) Understanding the Health Impacts of Air Pollution in London (July 2015) accessed at <https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/understanding-health-impacts-air-pollution-london>

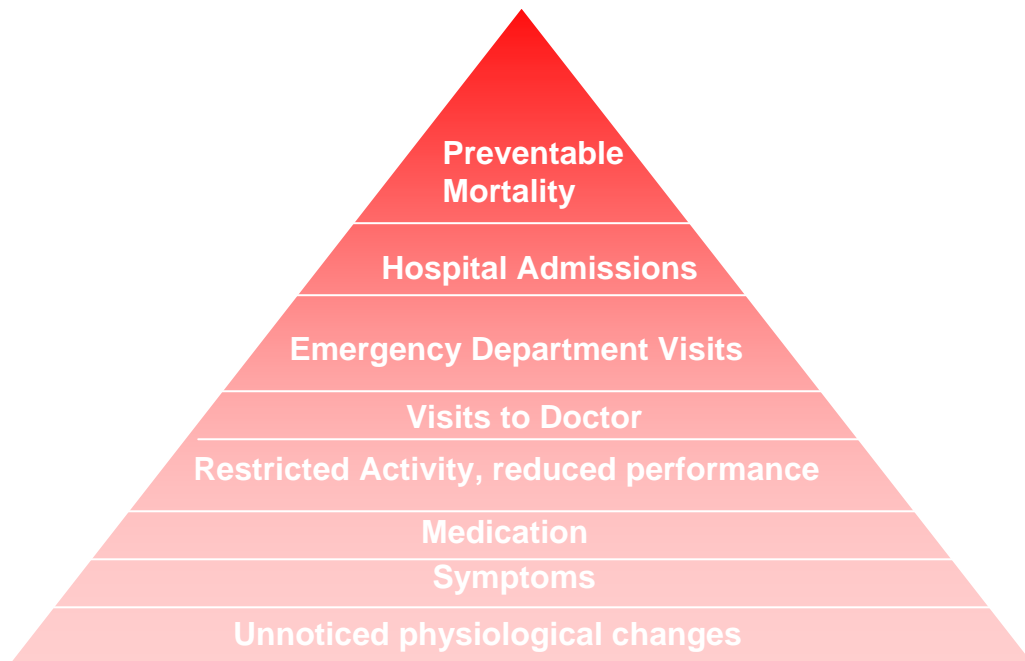
³ Royal College of Physicians (2016) every breath we take – The lifelong impact of air pollution (February 2016) accessed at <https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>

⁴ Short term exposure to air pollution and stroke: systematic review and meta-analysis accessed at <http://www.bmj.com/content/350/bmj.h1295>

from individual vehicles, when installed, used and maintained, but not all vehicles have these fitted and the sheer weight of traffic and the resultant congestion remains an issue.



Figure 1 The determinants of health and well-being in our neighbourhoods⁵



⁵ Barton H and Grant M. (2006) A health map for the local human habitat. The Journal for the Royal Society for the Promotion of Health, 126 (60 pp. 252 -253 ISBN 1466-4220

Figure 2 Impact of Air Pollution on Health⁶

Industrial activities – Just over the borough boundary, inside Lewisham, the SELCHP waste incinerator is the closest significant industrial source of air pollution to Southwark and is a Part A Prescribed Process under the Environmental Protection Act 1990. Its operations are regulated by the Environment Agency. Southwark regulates emissions from smaller processes such as crematoriums, print works, petrol stations and dry cleaners. These activities are called Part B Prescribed Processes.

Construction sites – Construction and demolition causes dust, fume and solvent pollution. Southwark have produced an Environmental Code of Construction Practice for contractors and developers. This is currently being revised to encompass the many recent changes in best construction practice.

Heating, hot water and energy use – All buildings in the borough need heating, hot water and electricity. Their production involves the creation of atmospheric pollution. All new developments in the borough are required to be carbon neutral and to have a Sustainability Assessment as part of the planning process. These requirements were introduced in the Southwark Plan 2012.

Commercial / Domestic burning – All the borough is a designated Smoke Control Area. This means that business and residents

- Must not cause smoke by burning ‘smoky’ unauthorized fuels (coal, wood, general waste or oil) in an open fireplace.
- May only burn ‘smoky’ unauthorized fuels in a legally approved appliance or exempted fireplace.
- May only burn ‘smokeless’ approved fuels in an open fireplace.
- May not have bonfires or burn in the open as the plume will affect neighbouring properties causing elevated local particulate levels and nuisance issues.

Pollutants from the pollution sources

The sources listed above produce numerous pollutants. The pollutants which are included in the Air Quality Regulations are

- Nitrogen Dioxide (NO₂)
- Particulate Matter (PM₁₀) – breathable fraction of particulates
- Particulate Matter (PM_{2.5}) – will cross the lung barrier into the blood
- Sulphur Dioxide (SO₂)

⁶ WHO Regional Office for Europe (2006) Air Quality Guidelines Global Update 2005 (Particulate matter, Ozone, Nitrogen dioxide and Sulphur dioxide) ISBN 92 890 2192 6 2006 accessed at <http://www.euro.who.int/en/health-topics/environment-and-health/Housing-and-health/publications/pre-2009/air-quality-guidelines.-global-update-2005.-particulate-matter.-ozone.-nitrogen-dioxide-and-sulfur-dioxide>

Pollutant	Sources	Health effects
Nitrogen dioxide	Road transport (especially diesel vehicles), domestic boilers, power stations and industry	Lung irritation and damage
Sulphur dioxide	Power stations, domestic boilers, industry	Coughing, irritation and narrowing of airways. Can make asthma and bronchitis worse
Fine Particulates (PM ₁₀ and PM _{2.5})	Road transport (mainly diesel vehicles and tyre and break wears), power stations, domestic boilers	Increased chances of respiratory disease, lung damage, cancer and premature death
Ozone	Produced when sunlight reacts with vehicle exhaust fumes	Irritation to eyes, nose and throat. Can damage lungs and airways

Air pollution can also damage trees, plants and buildings and contribute to climate change.

Information on local air quality

In the Borough the Authority has two continuous monitors which are situated at

- Elephant & Castle (Urban background site)
- Old Kent Road (Kerbside site)

These stations continuously monitor for Oxides of Nitrogen (NO_x) and Particulate Matter (PM₁₀) and (at Elephant & Castle only) Ozone (O₃). The data from these monitors is collected and displayed as part of the London Air Quality Network.⁷

The continuous monitors are supplemented with passive monitoring of Nitrogen Dioxide using diffusion tubes at a further 42 sites across the Borough.

The authority reviewed and assessed the air quality in the Borough found that there are areas in the Borough that did not meet the Government's air quality objectives. The authority was obliged to declare an Air Quality Management Area (AQMA). The area covered by the current AQMA can be seen in Figure 3. With the declaration of an AQMA, the Authority was required to produce an Air Quality Action Plan (AQAP) to work towards reducing the exceedences of the objective limit values for NO₂ and PM₁₀.

The Southwark maps for NO₂, PM₁₀ and PM_{2.5} are the first three maps in Appendix 2, the fourth map shows the NO₂ concentrations across the Greater London Area. The key on the right hand side of the maps indicates the limit for the relevant pollutant. Therefore any concentrations which are above the limit are in exceedence of the objective limit value.

However there is no limit marked on the PM_{2.5} map as there has been no limit set. In the Air Quality Directive a new approach for PM_{2.5} was introduced in recognition of the lack of evidence to indicate that there is a concentration of particulate matter below which health effects do not occur. This new approach aims to achieve a reduction in the overall exposure of the population to PM_{2.5} based on the concept that greater public health benefits could be obtained from a general reduction in exposure than from a policy aimed at reducing exposure in hot spots only.

⁷ London Air quality Network accessed at <http://www.londonair.org.uk/LondonAir/Default.aspx>

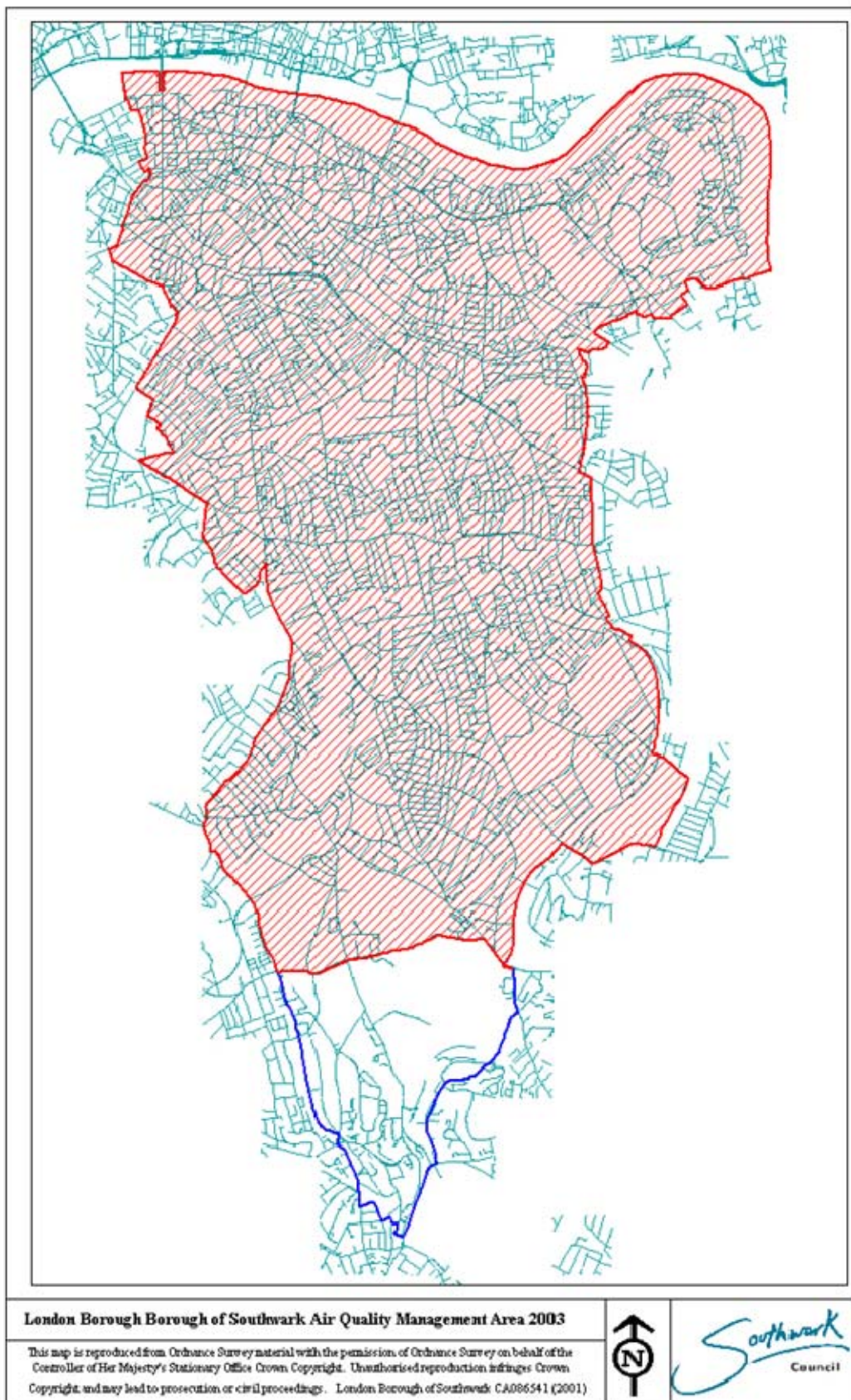


Figure 3 Map of AQMA Boundary

The GLA London Local Air Quality Management Framework (LLAQMF)

The legal framework for local air quality management is the National Air Quality Regulations and Part IV of the Environment Act 1995 (the 1995 Act). Until May 2016, London local authorities undertook their duties following the Government's Policy and Technical Guidance publication. However, DEFRA has recognised that London faces particular challenges in meeting the air quality objectives and has agreed that London Boroughs should refer to the relevant GLA air quality management policy and technical guidance for London. The GLA's London Local Air Quality Management Framework came into effect in May 2016. It has been designed to tackle the serious public health problem being caused by poor air quality in London and reduce the burden on Local Authorities in fulfilling the statutory requirements of their duties in respect of air quality under the 1995 Act. The LLAQMF reflects that the Mayor has broad "reserve powers" of intervention under Section 85 of the Environment Act 1995.

All local authorities in England must have regard to the relevant air quality advice and guidance when discharging their functions under Part IV of the Environment Act 1995. To fulfill this requirement, this authority is required to:

- Continue to monitor and assess air pollution in their area (Nitrogen Dioxide (NO₂), Particulate Matter (PM₁₀) and Sulphur Dioxide (SO₂);
- The Authority has followed the LLAQMF Policy⁸ and Technical Guidance⁹ documents
- Ensure that an Air Quality Management Area (AQMA) is declared in any locations exceeding the air quality EU Objective Limit Values.
- Complete an Annual Status Report (ASR) and its public-facing summary, the Annual Status Summary Report (ASSR),
- Ensure that a current and relevant Air Quality Action Plan is in place for any declared AQMA
- Re-assess any GLA Air Quality Focus Areas
- Have clear, approved governance arrangements for air quality.

There is a strong emphasis within the policy guidance that there is ownership of the Air Quality Action Plan at all levels of the Authority, including Cabinet, and that the Action Plan is signed off by the Borough's Director of Public Health and the Head of Transport.

Appendix 3 lists the criteria that need to be met for the Borough to become a Cleaner Air for London Borough and have access to the Mayor's Air Quality Fund

The relationship between poor air quality and public health outcomes framework

The Public Health Outcomes Framework (PHOF) is a Department of Health data tool for England intended to focus public health action on increasing healthy life expectancy and reducing differences in life expectancy.

In Appendix 4, there is a diagram showing the vision, the aims and the four different domains in connection with the PHOF.

⁸ GLA (2016) DRAFT LONDON LOCAL AIR QUALITY MANAGEMENT (LLAQM) Technical Guidance 2016 (LLAQM.TG (16)) accessed at <https://www.london.gov.uk/what-we-do/environment/environment-publications/draft-london-local-air-quality-management-technical>.

⁹ GLA (2016) DRAFT LONDON LOCAL AIR QUALITY MANAGEMENT (LLAQM) - Policy Guidance 2016 (LLAQM.PG (16)) accessed at <https://www.london.gov.uk/what-we-do/environment/environment-publications/draft-london-local-air-quality-management>.

- Domain 1** **Improving the wider determinants of health** - Improvements against wider factors that affect health & wellbeing and health inequalities.
- Domain 2** **Health Improvement** - People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities.
- Domain 3** **Health Protection** - The population's health is protected from major incidents and other threats, while reducing health inequalities.
- Domain 4** **Healthcare public and preventing premature mortality** – Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities.

Each of the domains have a number of indicators, there is an indicator directly associated with air quality relating to fine particulate matter (PM_{2.5}). The indicator relates to the mortality effect of man made particulate air pollution expressed as the percentage mortality fraction attributable to particulate matter (PM_{2.5}) for an upper tier local authority. The current (2013) PM_{2.5} indicator for Southwark is 7.2%. Comparing all the London Borough's this places Southwark 9th in a table of 33 Boroughs with the City of London having the highest level of 8.4%.

Boroughs are expected to work towards reducing emissions and concentrations of PM_{2.5} in their area. It is not expected the Authority carry out any additional local review and assessment, but use the resources provided by the GLA in the Borough specific London Atmospheric Emission Inventory.

In their AQAP the Borough is expected to set out how they have chosen to work towards reducing PM_{2.5} and include links to the PHOF. The policy and technical guidance give examples of how this can be achieved.

The second part of Appendix 4 lists all the indicators within each of the domains. The improvement of air quality in the Borough will not only improve the PM_{2.5} indicator, but will also have a positive influence on 27 of the other indicators in the PHOF. The indicators highlighted in yellow are either directly or indirectly influenced by the implementation of the actions in the preliminary draft of the Air Quality Action Plan.

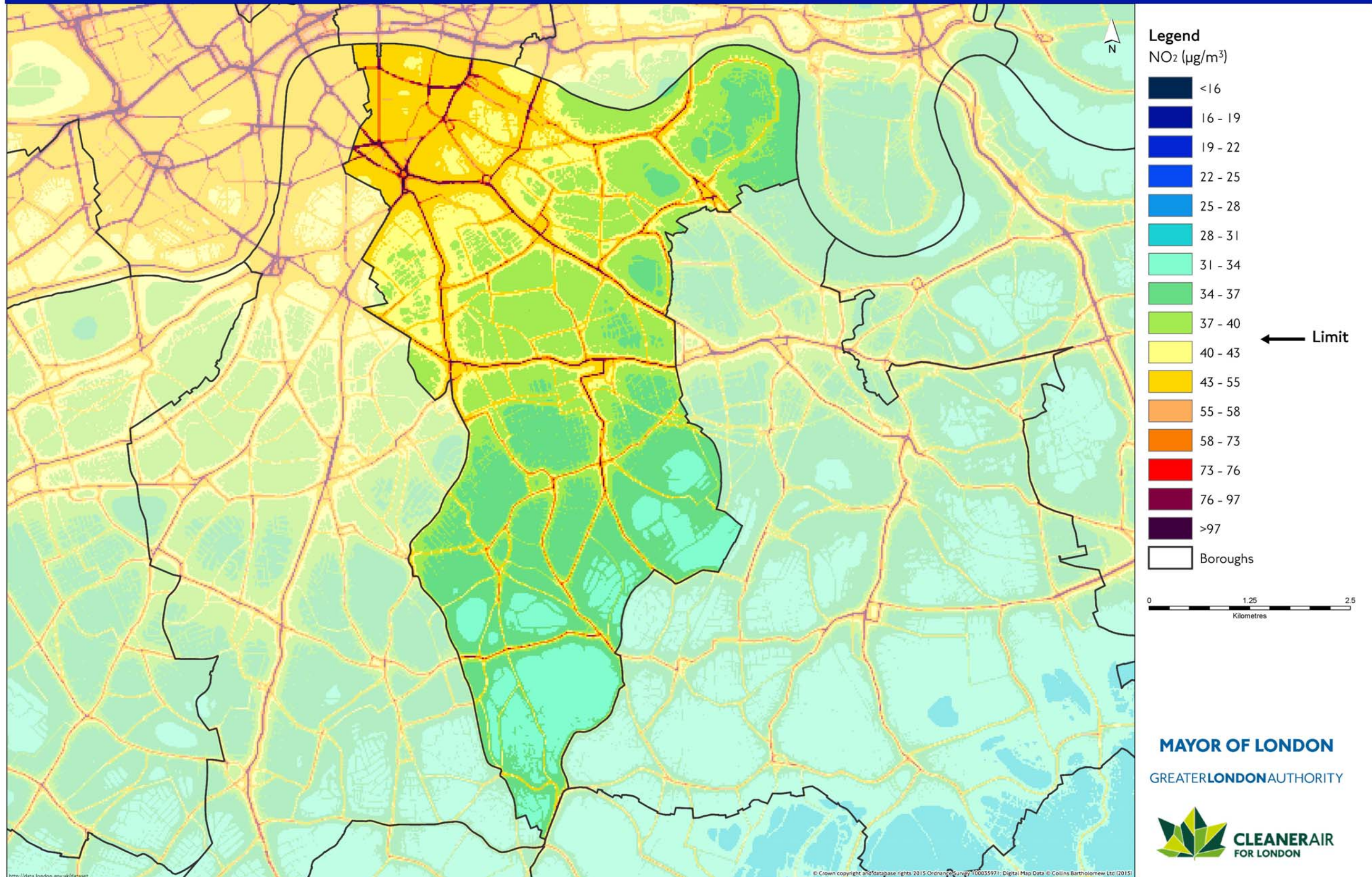
Southwark Air Quality Action Plan review

The current Air Quality Action Plan was adopted in May 2012 and was due to be reviewed in 2017. With the introduction of the London Local Air Quality Management Framework, the Authority is taking an opportunity to review its action plan. The preliminary draft is currently under internal consultation with the delivery services. In autumn 2016, the final draft of the new air quality action plan will be opened to wider consultation and a briefing will be given to the Health & Wellbeing Board during that consultation.

Appendix 2 GLA / Atmospheric Pollutant Concentration Maps

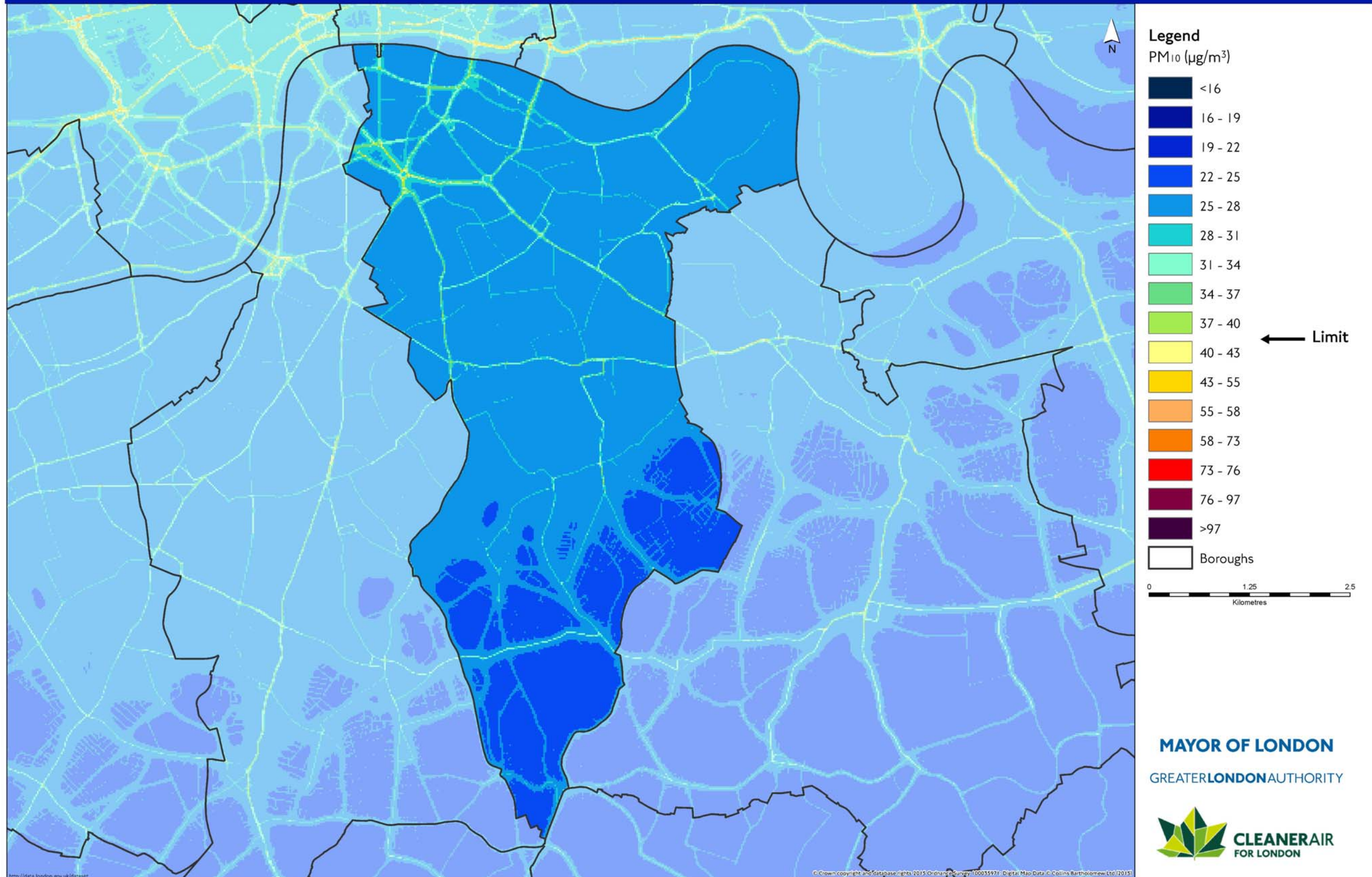
London Borough of Southwark Annual Mean NO₂ concentrations 2013

LAEI 2013



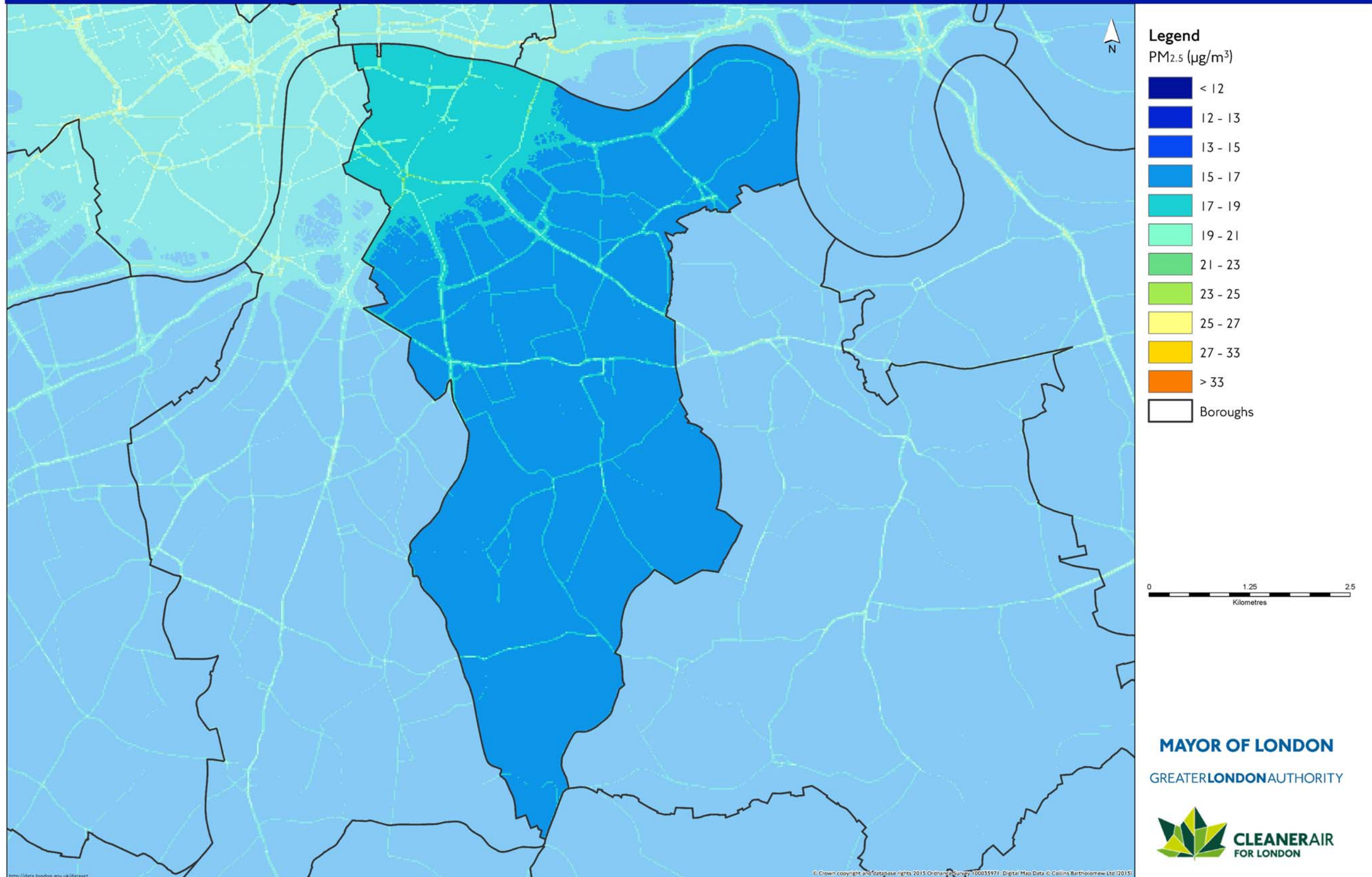
London Borough of Southwark Annual Mean PM₁₀ concentrations 2013

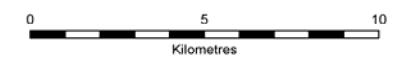
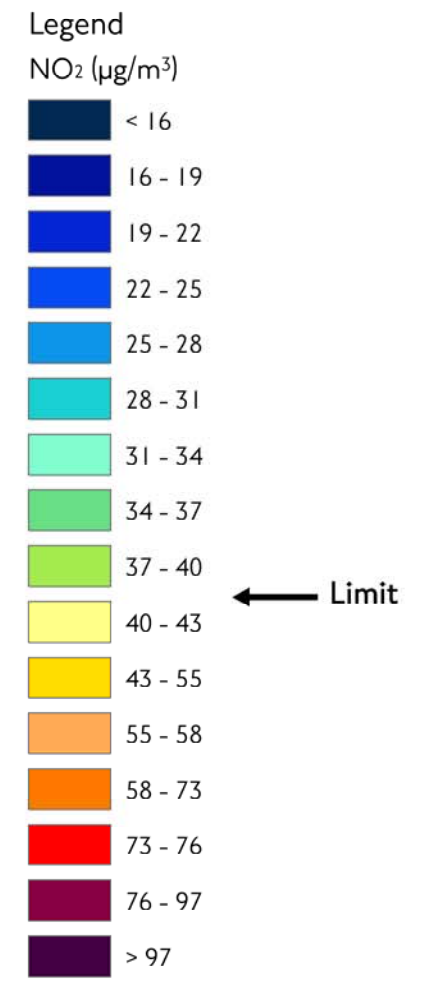
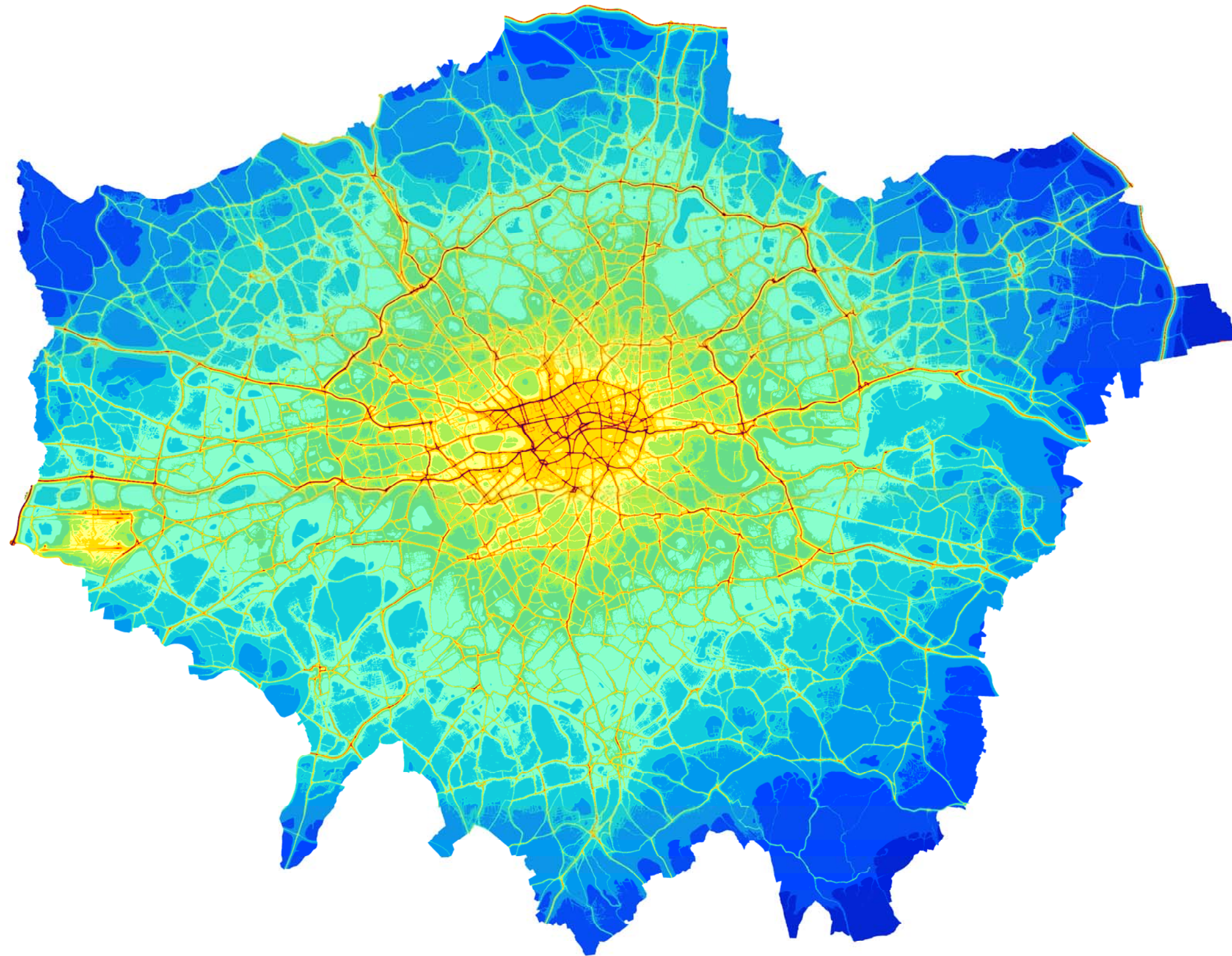
LAEI 2013



London Borough of Southwark Annual Mean PM_{2.5} concentrations 2013

LAEI 2013





<http://data.london.gov.uk/dataset>

Appendix 3 Air Quality Exemplar Qualifying Criteria

To access funding from the new Mayor's Air Quality Fund, boroughs are asked to commit to make progress against each of the following criteria.

1. Political leadership

- To become a Cleaner Air for London Borough the authority will have to pledge (at cabinet level) to take significant action to improve local air quality and sign up to specific delivery targets.
- This includes having an up-to-date air quality action plan, fully incorporated into LIP funding and core strategies.

2. Taking action

Examples include:

- Taking decisive action to address air pollution, especially where human exposure and vulnerability (e.g. schools, older people, hospitals etc.) is highest.
- Integrate transport and air quality, including by improving traffic flows on borough roads to reduce stop/start conditions.
- Making additional resources available to improve local air quality, including by pooling its collective resources (s106 funding, LIPs, parking revenue, etc.).

3. Leading by example

Examples include:

- Maintaining an appropriate monitoring network so that air quality impacts within the borough can be properly understood.
- Reducing emissions from council operations, including from buildings, vehicles and all activities.
- Adopting a procurement code which reduces emissions from its own and its suppliers activities, including from buildings and vehicles operated by and on their behalf (e.g. rubbish trucks).

4. Using the planning system

Examples include:

- Fully implementing the Mayor's policies relating to air quality neutral, combined heat and power and biomass.
- Collecting s106 from new developments to ensure air quality neutral development.
- Additional enforcement of construction and demolition guidance, with regular checks on medium and high risk building sites.

5. Integrating air quality into the public health system

Examples include:

- Including air quality in the borough's Health and Wellbeing Strategy, including measures to promote adaptation amongst vulnerable groups.

6. Informing the public

Examples include:

- Ensuring consistency of branding by using the "Cleaner Air for London" marquee.
- Building a network of air quality champions in schools, businesses, public sector and social housing linked to the Mayor's programme.

Appendix 4 Public Health Outcome Framework

Vision: To improve and protect the nation's health and wellbeing, and improve the health of the poorest fastest

Outcome 1: Increased healthy life expectancy

Taking account of the health quality as well as the length of life

Outcome 2: Reduced difference in life expectancy and health life expectancy between communities

Through greater improvements in more disadvantaged communities



DOMAIN 1:

Improving the Wider Determinants of Health

Objective:

Improvements against wider factors which affect health and wellbeing and health inequalities

DOMAIN 2:

Health Improvement

Objective:

People are helped to healthy lifestyles, make healthy choices and reduce health inequalities

DOMAIN 3:

Health protection

Objective :

The population's health is protected from major incidents and other threats whilst reducing health inequalities

DOMAIN 4:

Healthcare public health & preventing premature mortality

Objective :

Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities.

The indicators highlighted in yellow below are either directly or indirectly influenced by the implementation of the actions in the preliminary draft of the Air Quality Action Plan. The highlighted green indicator is an air pollution specific indicator.

Domain 1 Improving the wider determinants of health

Objective

Improvements against wider factors that affect health and wellbeing and health inequalities

Indicators

- Children in poverty
- School readiness
- Pupil absence
- First-time entrants to the youth justice system
- 16-18 year olds not in education, employment or training
- Adults with a learning disability / in contact with secondary mental health services who live in stable and appropriate accommodation
- People in prison who have a mental illness or a significant mental illness
- Employment for those with long-term health conditions including adults with a learning disability or who are in contact with secondary mental health services
- Sickness absence rate
- Killed and seriously injured casualties on England's roads
- Domestic abuse
- Violent crime (including sexual violence)
- Re-offending levels
- The percentage of the population affected by noise
- Statutory homelessness
- Utilisation of green space for exercise/health reasons
- Fuel poverty
- Social isolation
- Older people's perception of community safety

Domain 2 Health improvement

Objective

People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities

Indicators

- Low birth weight of term babies
- Breastfeeding
- Smoking status at time of delivery
- Under 18 conceptions*
- Child development at 2-2½ years (under development)
- Excess weight in 4-5 and 10-11 year olds*
- Hospital admissions caused by unintentional and deliberate injuries in children and young people aged 0-14 and 15-24 years

- Emotional well-being of looked after children
- Smoking prevalence – 15 year olds (placeholder)
- Self-harm
- Diet
- Excess weight in adults
- Proportion of physically active and inactive adults
- Smoking prevalence – adult (over 18s)
- Successful completion of drug treatment
- People entering prison with substance dependence issues who are previously not known to community treatment
- Recorded diabetes
- Alcohol-related admissions to hospital
- Cancer diagnosed at stage 1 and 2
- Cancer screening coverage
- Access to non-cancer screening programmes
- Take up of the NHS Health Check Programme – by those eligible*
- Self-reported wellbeing
- Falls and injuries in people aged 65 and over

Domain 3 Health protection

Objective

The population's health is protected from major incidents and other threats, while reducing health inequalities

Indicators

- Fraction of mortality attributable to particulate air pollution
- Chlamydia diagnoses (15-24 year olds)*
- Population vaccination coverage
- People presenting with HIV at a late stage of infection
- Treatment completion for Tuberculosis (TB)
- Public sector organisations with board-approved sustainable development management plan
- Comprehensive, agreed inter-agency plans for responding to health protection incidents and emergencies*

Domain 4 Healthcare public health and preventing premature mortality

Objective

Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities.

Indicators

- Infant mortality
- Tooth decay in children aged 5
- Mortality from causes considered preventable
- Mortality from all cardiovascular diseases (including heart disease and stroke)
- Mortality from cancer
- Mortality from liver disease
- Mortality from respiratory diseases
- Mortality from communicable diseases
- Excess under 75 mortality in adults with serious mental illness
- Suicide rate
- Emergency readmissions within 30 days of discharge from hospital
- Preventable sight loss
- Health-related quality of life for older people
- Hip fractures in people aged 65 and over
- Excess winter deaths
- Estimated diagnosis rate for people with dementia