

Overview & Scrutiny Committee

Tuesday 14 March 2017

7.00 pm

Ground Floor Meeting Room G02A - 160 Tooley Street, London SE1 2QH

Membership

Councillor Gavin Edwards (Chair)
Councillor Rosie Shimell (Vice-Chair)
Councillor Anood Al-Samerai
Councillor Jasmine Ali
Councillor Paul Fleming
Councillor Tom Flynn
Councillor Rebecca Lury
Councillor Eleanor Kerlake
Councillor Michael Situ
Councillor Maria Linforth-Hall
Councillor Kieron Williams
Martin Brecknell
Lynette Murphy-O'Dwyer

Reserves

Councillor James Barber
Councillor Catherine Dale
Councillor Karl Eastham
Councillor Jon Hartley
Councillor Ben Johnson
Councillor Sunny Lambe
Councillor David Noakes
Councillor Leo Pollak
Councillor Martin Seaton
Councillor Cleo Soanes

INFORMATION FOR MEMBERS OF THE PUBLIC

Access to information

You have the right to request to inspect copies of minutes and reports on this agenda as well as the background documents used in the preparation of these reports.

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Contact Shelley Burke on 020 7525 7344 or email: Shelley.burke@southwark.gov.uk

Members of the committee are summoned to attend this meeting

Eleanor Kelly

Chief Executive

Date: 6 March 2017



Overview & Scrutiny Committee

Tuesday 14 March 2017
7.00 pm

Ground Floor Meeting Room G02A - 160 Tooley Street, London SE1 2QH

Order of Business

Item No.	Title	Page No.
1.	APOLOGIES	
	PART A - OPEN BUSINESS	
2.	NOTIFICATION OF ANY ITEMS OF BUSINESS WHICH THE CHAIR DEEMS URGENT	
	In special circumstances, an item of business may be added to an agenda within five clear working days of the meeting.	
3.	DISCLOSURE OF INTERESTS AND DISPENSATIONS	
	Members to declare any interests and dispensations in respect of any item of business to be considered at this meeting.	
4.	MINUTES	1 - 4
	To approve as a correct record the Minutes of the open section of the meetings held on Monday 30 th January 2017.	
5.	FOLLOW UP ON BUDGET SCRUTINY	
6.	INTERVIEW OF CABINET MEMBER FOR ENVIRONMENT AND THE PUBLIC REALM - COUNCILLOR IAN WINGFIELD	
7.	AIR QUALITY STRATEGY AND ACTION PLAN	5 - 79

- Draft Air Quality Strategy & Action plan
- Technical appendices
- List of consultation comments received and responses to the points raised

8. TRANSPORT REPORT - FROM COUNCILLOR G EDWARDS

DISCUSSION OF ANY OTHER OPEN ITEMS AS NOTIFIED AT THE START OF THE MEETING.

PART B - CLOSED BUSINESS

DISCUSSION OF ANY CLOSED ITEMS AS NOTIFIED AT THE START OF THE MEETING AND ACCEPTED BY THE CHAIR AS URGENT.

DISTRIBUTION LIST 2016/17

Date: 6 March 2017

EXCLUSION OF PRESS AND PUBLIC

The following motion should be moved, seconded and approved if the sub-committee wishes to exclude the press and public to deal with reports revealing exempt information:

“That the public be excluded from the meeting for the following items of business on the grounds that they involve the likely disclosure of exempt information as defined in paragraphs 1-7, Access to Information Procedure rules of the Constitution.”



Overview & Scrutiny Committee

MINUTES of the OPEN section of the Overview & Scrutiny Committee held on Monday 30 January 2017 at 1.00 pm at Ground Floor Meeting Room G02A - 160 Tooley Street, London SE1 2QH

PRESENT: Councillor Gavin Edwards (Chair)
 Councillor Rosie Shimell
 Councillor Anood Al-Samerai
 Councillor Jasmine Ali
 Councillor Paul Fleming
 Councillor Rebecca Lury
 Councillor Eleanor Kerslake
 Councillor Kieron Williams

OTHER MEMBERS PRESENT: Councillor Fiona Colley Cabinet member for Finance, Modernisation & Performance

Councillor Richard Livingstone Cabinet member for Adult Care, Financial Inclusion and Public Health

Councillor Vicky Mills Cabinet member for Children and Schools

Councillor Barrie Hargrove Cabinet member for Communities Safety and Leisure

Councillor Ian Wingfield Cabinet member for Environment and the Public Realm and Parks

Councillor Mark Williams Cabinet member for Regeneration and New Homes

Councillor Stephanie Cryan Cabinet member for Housing (General Fund Only)

Councillor Johnson Situ Cabinet member for Business Employment and Culture

**OFFICER
SUPPORT:**

Shelley Burke – Head of Overview and Scrutiny

1. APOLOGIES

1.1 Apologies for absence were received from Councillors Tom Flynn, Michael Situ and Maria Linforth-Hall. Apologies for lateness were received from Councillors Paul Fleming and Rosie Shimell.

2. NOTIFICATION OF ANY ITEMS OF BUSINESS WHICH THE CHAIR DEEMS URGENT

2.1 There were none.

3. DISCLOSURE OF INTERESTS AND DISPENSATIONS

3.1 Councillor Rebecca Lury declared that she was a trustee of the parks of London. Councillor Edwards declared that he would withdraw from the chair when the committee interviewed councillor Vicky Mills as they were married and councillor Rosie Shimell would chair that interview.

4. POLICY AND RESOURCES STRATEGY 2017-18

4.1 Each Cabinet member introduced their portfolio and answered questions from members of the committee.

4.2 The committee formulated the following recommendations to the Cabinet at the end of all the interviews.

RESOLVED:

1. That the monitoring process for delivering savings and efficiencies in Children's and Adult Social Care should include updates to Overview & Scrutiny Committee in June and November 2017 – this should include any concerns arising from discussions at budget recovery board.
2. That the Cabinet works with the NHS to change accessibility rules and manage demand to ensure public health spending is kept under control. This would include work to ensure Southwark residents are accessing care that meets their needs but also reduces unnecessary costs.
3. That there is a review of the voluntary redundancy scheme to ensure it is cost effective and that it can be accessed by low paid staff.
4. That the cabinet carries out external consultation with service users, their families and voluntary sector groups regarding changes to Adult Social Care Services. This should be in addition to consultation with staff and individuals whose care packages might be subject to review.
5. That the cabinet member for environment and the public realm works with local

housing associations and private managing agents to improve waste management services available to residents through exploring options around Southwark council waste contracts.

VIDEO OF SCRUTINY BUDGET INTERVIEWS

Opening the meeting and Budget Overview - Councillor F Colley

<https://bambuser.com/v/6616197>

<https://bambuser.com/v/6616212>

<https://bambuser.com/v/6616234>

<https://bambuser.com/v/6616239>

<https://bambuser.com/v/6616245>

Adult Care, Financial Inclusion and Public Health – Councillor R Livingstone

<https://bambuser.com/v/6616258>

<https://bambuser.com/v/6616267>

<https://bambuser.com/v/6616268>

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<https://bambuser.com/v/6616300>

<https://bambuser.com/v/6616315>

Children and Schools – Councillor V Mills

<https://bambuser.com/v/6616363>

Communities Safety and Leisure – Councillor B Hargrove

<https://bambuser.com/v/6616359>

Environment and the Public Realm and Parks – Councillor I Wingfield

<https://bambuser.com/v/6616389>

<https://bambuser.com/v/6616432>

Regeneration and New Homes – Councillor M Williams

<https://bambuser.com/v/6616497>

Housing (General Fund only) – Councillor S Cryan

<https://bambuser.com/v/6616498>

Business, Employment and Culture – Councillor J Situ

<https://bambuser.com/v/6616500>

Finance, Modernisation & Performance and Leader's Portfolio – Councillor F Colley

<https://bambuser.com/v/6616506>

Scrutiny Recommendations

<https://bambuser.com/v/6616525>

Meeting ended at 6.15 pm

CHAIR:

DATED:



Air Quality Strategy & Action Plan

November 2016

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1 - Introduction

This Air Quality Strategy & Action Plan replaces the preceding Southwark Council Air Quality Strategy and Air Quality Action Plan 2012-17. Since the last air quality action plan was developed there has been an increase understanding in respect of the impacts of Nitrogen Dioxide (NO₂), fine particles (PM₁₀) and very fine particles (PM_{2.5}) on the health of the population.

King's College London published "Understanding the Health Impacts of Air Pollution in London" in July 2015. This estimated the health burden from exposure to NO₂ and Particulate Matter (PM_{2.5}) in the London area. There are statistical uncertainties within the evidence so the result of the study gives approximate figures.

"52,500 life-years lost, equivalent to 3,500 deaths at typical ages for PM_{2.5}, 88,000 life-years lost, equivalent to 5,900 deaths at typical ages for NO₂ accounting for overlap with PM_{2.5} and together up to as much as 141,000 life-years lost, equivalent to 9,500 deaths at typical ages (assuming a 30% overlap between the effects of PM_{2.5} and NO₂ and comparing with a zero concentration of NO₂)."

A recent study has found that, for children living and going to school near main roads, their lung development is impaired by up to 10%. In some areas the concentrations of NO₂ are more than double the health-based national air quality objective.

Studies have shown that local air quality can be impacted by climate change and conversely climate change can impact local air quality. Pollutants impacting on climate change and local air quality share many common sources.

Southwark is committed to integrating our Air Quality and Climate Change policies to protect the health of all; including residents, visitors and those working in the borough, and to address associated issues and actions in a cost effective way.

As part of the UK National Air Quality Strategy, The Environment Act 1995 requires Local Authorities to have an Air Quality Strategy, to declare Air Quality Management Areas at locations where air quality does not meet the objective limits for certain pollutants, and, where an Air Quality Management Area has been declared, have a consulted and approved Air Quality Action Plan to reduce the relevant atmospheric pollutant/s within that area so that, at some point in the future, the area will meet the national air quality objective limits.

Poor air quality has numerous negative health effects proven by scientific study. These include impairing the development of lung function in infants and young children and negatively impacting on those who; have compromised lung function such as Chronic Obstructive Pulmonary Disorder; asthma; high blood pressure; and, are at risk of stroke or heart attack. Also some airborne particles are carcinogenic. Poor air quality disproportionately affects the young, old, ill and poor. In Southwark cardiovascular disease and cancer account for more than half of local deaths and drugs to treat respiratory illness are one of the most significant areas of expenditure for the local Primary Care Trust. Several academic studies show that there is a spike in emergency admissions to hospital several days after episodes of high levels of atmospheric pollution.

Poor air quality has an impact on biodiversity and buildings. Sensitive plants, including commercial food plant species are unable to thrive and fish and insect populations, and the species that rely on them in the biosphere, dwindle. The external surfaces of buildings become soiled by particles and soot and may be unduly weathered by aggressive chemicals caused by pollutants dissolving in rainwater as it falls.

The economic cost of the damage caused by poor air quality is very significant and that cost falls disproportionately on those who live and spend their time in atmospherically polluted areas and on the National Health Service. Poor air quality directly causes over 9,400 early deaths in London every year. Central London and areas adjacent to the capital's main road network continue to not comply with the air quality objectives, despite all time limits for compliance having elapsed.

The national government has been criticised for its lack of action with regard to air quality and is currently under threat of legal action in both national and European courts due to the continued lack of compliance of many UK towns, cities and conurbations with the air quality objective limits. S.48 and S.52 of the Localism Act 2011 make provision for government ministers to require public authorities, such as local and regional government, to make payments in respect of any sanction levied against them for non-compliance with the EU Directives.

Sources of atmospheric pollution in Southwark

The main atmospheric pollutants of concern in Southwark are Nitrogen Dioxide (NO₂) and Particulates, both PM₁₀ (breathable) & PM_{2.5} (able to pass into blood stream). Locally the main source of both pollutants is road transport emissions, with large scale combustion plants and heating systems, construction site plant and domestic heating emissions also significantly contributing to poor air quality.

Due to air quality objectives being exceeded for Nitrogen Dioxide in a large portion of the borough and Particulates in some key locations, Southwark has declared an Air Quality Management Area. The following information can be found in Appendices 3 & 4 attached to this document:

- map of the Air Quality Management Area,
- map of the modelled emissions of Nitrogen Dioxide
- map of the modelled emissions of Particulates (PM₁₀ & PM_{2.5}), and
- the source apportionment (what is causing the air pollution)

2 – Air Quality Strategy

The Air Quality Strategy

The Southwark Air Quality Strategy aims to:

- 1) Ensure compliance with the following legislation:-
 - EU Directives 1996/62/EC, 1999/30/EC, 2000/69/EC, 2002/3/EC, 2004/107/EC and 2008/50/EC
 - The Environment Act 1995
 - The Environmental Protection Act 1990
 - The Clean Air Act 1993
 - The Air Quality Standards Regulations 2010 & 2011

- 2) Comply with the GLA London Local Air Quality Management Framework by:-
 - Having a valid and relevant Air Quality Strategy
 - Regularly reviewing the area covered by our Air Quality Management Area
 - Having an Air Quality Action Plan containing actions on:-
 - ✓ Air quality management within Southwark
 - ✓ Reducing emissions from buildings
 - ✓ Increasing public awareness of local air quality & related public health issues
 - ✓ Reducing emissions from road traffic
 - ✓ Reducing carbon emissions that contribute to poor local air quality
 - ✓ Regulation within the borough using enforcement powers to protect local air quality
 - Delivering the Air Quality Action Plan
 - Monitoring local air quality by maintaining our monitoring network and improving it where and when resources permit
 - Providing an Annual Status Report giving the detail of the results of local air quality monitoring and our progress against the Air Quality Action Plan
 - Providing an Annual Status Summary Report to accompany the Annual Status Report

- 3) Support the GLA's air quality objectives by:-
 - Retaining Southwark's Cleaner Air Borough Status
 - Supporting, where possible and appropriate, the Mayor of London's air quality policies, objectives and actions
 - Bidding for funds from the Mayor's Air Quality Fund, Defra's Air Quality Fund and any other organisation offering relevant bidding opportunities to resource air quality improvement actions and projects within Southwark
 - Working with the Mayor of London's office to promote good environmental awareness and practice to business, commerce, road users and the general public

- Being mindful of the content of the London Plan and relevant Special Planning Guidance
 - Lobbying for clean air for Londoners
- 4) Support action on local Public Health objectives by:-
- Maintaining local air quality as a local public health priority
 - Ensuring a cohesive suite of policies by co-ordinating local air quality policy with other service areas in the production of relevant local policy documents, for example:-
 - ✓ Local Development Framework – The Southwark Plan & Core Strategy
 - ✓ Local planning policies and special planning guidance
 - ✓ Transport Plan
 - ✓ Kerbside Strategy
 - ✓ Sustainability Strategy
 - ✓ Carbon Reduction Action Plan
 - ✓ Housing & Modernisation programme
 - ✓ Tree Planting, Parks & Green Space Strategies

3 – Strategic Air Quality Action Plan

Strategic Aims	Objectives	Action number
Management of Air Quality	Monitor local air quality	1.1 - 1.3
	Comply with the requirements of the London Local Air Quality Management Framework	1.4 - 1.6
	Devise a communication plan for air quality	1.7
Reduce Emissions from Buildings	Provide technical guidance on air quality assessment & mitigation	2.1
	Use planning process to reduce emissions from new and refurbished developments and to implement the highest environmental standards for emissions to air	2.2
	Raise awareness regarding fuel economy	2.3
Public Health and Awareness	Encourage active travel including walking & cycling	3.1 - 3.4
	Publicise air-text air quality forecasts and cleaner routes for active travel	3.5
	Ensure web-based information and guidance on air quality is available and up to date	3.7
	Run communication campaigns on personal and business behaviour change to improve air quality	3.8
	Work with clinicians to ensure information on the health impact of air quality is passed to relevant patients e.g. those with COPD, asthma, heart conditions, at risk of stroke, etc.	3.9
Cleaner Transport	Promote the provision of electric and alternative fuels infrastructure	4.1
	Promote freight consolidation	4.2 - 4.6
	Encourage logistics fleets operation in the borough to get FORS scheme Silver accreditation	4.4
	Reduce emissions from Southwark vehicle fleets	4.7 & 4.8
	Ensure Southwark Council's travel plan is up to date	4.9 & 4.10
	Lobby to improve the public transport infrastructure in Southwark	4.11, 4.15 & 4.16
	Lobby to reduce emissions from buses & taxis	4.13 & 4.14
	Support the extension of ULEZ to south circular	4.15
Take part in anti-idling campaigns	4.17	

Strategic Aims	Objectives	Action number
Reducing Carbon Emissions	Promote reduced fuel/energy consumption from buildings	5.1 - 5.7
	Improve the energy efficiency of Buildings managed by Southwark Council	5.8 - 5.12
	Install renewable energy technologies to Southwark Council buildings	5.13
	Use planning policy to reduce local atmospheric emissions	5.14 - 5.16
	Increase the no. of council homes using renewable energy from SELCHP	5.17
Regulation & Enforcement	Actively discourage & prevent the burning of unauthorised fuels in Southwark's Smoke Control Zone	6.1 & 6.2
	Ensure all Part B EPA'90 processes in the borough maintain compliance with their permits	6.3
	Ensure construction sites are regulated to the highest standard	6.4 - 6.6
	Discourage and prevent bonfires and open burning	6.8
Support the GLA Air Quality Aims	Take air quality improvement actions within designated GLA Air Quality Focus Areas	7.1
	Retain Southwark's Cleaner Air Borough status	7.2
	Support the extension of the ULEZ to the south circular	7.3
	Support the GLA's planning policy	7.4
	Support and lobby for cleaner air for Londoners	7.6
Support Public Health	Include local air quality in Southwark's Joint Strategic Needs Assessment	8.1
	Retain local air quality as a public health priority	8.2
	Ensure local air quality is considered in all relevant policy documents	8.3
	Devise a local cascade for poor air quality alerts	8.4
	Bid for funds from the Mayor's Air Quality Action Fund and other sources to improve local air quality and thus public health	8.5

Appendix 1 – Air Quality Action Plan Workstreams

Section 1 – Management of Air Quality

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations/ benefit	Directorate	Delivered by Lead Service Area / Team
1 – 1	Monitoring Air Quality	Maintain the two continuous Air Quality Monitoring Stations in the Borough	Ensure that the Air Quality Monitoring Stations at the Elephant & Castle and the Old Kent Road are maintained, serviced and calibrated to current guidance	90 per cent data capture.	To inform air quality policy	Environment & Leisure	Environmental Protection
1 – 2		Maintain the Nitrogen Dioxide Diffusion Tube survey in the Borough	Ensure that the Nitrogen Dioxide Diffusion tube monitoring is maintained in accordance with current guidance	The collection and deployment of diffusion tubes is carried out on 100% of the dates set by Defra.	To inform air quality policy	Environment & Leisure	Environmental Protection
				100% of the tubes collected analysed. Results to be regularly displayed on the Southwark web pages	To inform air quality policy	Environment & Leisure	Environmental Protection

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Section 1 – Management of Air Quality

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
1 – 3	Monitoring Quality Air	Review the use of low - cost sensor technology to enable roadside monitoring in order to underpin the air quality modelling in the Borough	Use of low-cost sensors on area surveys for proposed road projects	Pilot 3 road projects to use low – cost sensor technology.	To inform air quality policy	Chief Executive	Transport Policy
1 – 4	London Local Air Quality Management Framework	Prepare and produce all London Local Air Quality Management Framework reports as required	Ensure that all reports required by the London Local Air Quality Management Framework are produced	Reports produced and submitted to Defra and GLA when required	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
1 – 5		Respond to all appropriate air quality consultations	Review all air quality consultation requests and respond to them where appropriate.	100% of the appropriate air quality consultation reports are submitted by the consultation deadline	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
1- 6		Ensure that the air quality action plan is current	Review the Authority's local air quality action plan to ensure it is clear and up to date.	Review Air Quality Action Plan annually	NO ₂ & PM	Environment & Leisure	Environmental Protection
1 – 7		Have a communication plan for air quality	Devise a communication plan for air quality	Review the air quality communication every quarter	NO ₂ , PM & CO ₂	Chief Executive	Environmental Protection & Comms

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Section 2- Reduce Emissions

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
2 – 1	Local Air Quality Assessments	Ensure that local air quality technical guidance provides the latest advice on air quality assessment and mitigation	Devise air quality technical guidance	Review technical guidance annually	NO ₂ & PM	Environment & Leisure	Environmental Protection
2 – 2	Environmental Standards	Planning applications assessed to ensure that all applications will meet the aim of measure 2-1	Assessment of all relevant planning applications	100% of relevant planning applications assessed	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
2 – 3	Increase the awareness of residents, businesses & visitors of need to reduce emissions to atmosphere	To promote the reduction of total emissions to ensure the protection of public health and the natural environment	Raise awareness to reduce emissions to the atmosphere to protect public health and the local environment	Initiate annual, season-relevant campaign on fuel type and fuel economy	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection & Comms

Section 3- Public Health Education and Awareness

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
3 – 1	Encourage residents and those working in the borough to walk and cycle	Encourage children to walk or cycle to school	Promote School Travel Plans & increase the number of schools attaining Silver and Gold accreditation each year until 2020	Increase the number of schools with Silver accreditation each year	NO ₂ , PM & CO ₂	Environment & Leisure	Sustainable Travel & Road Safety
				Increase the number of schools with Gold accreditation each year	NO ₂ , PM & CO ₂	Environment & Leisure	Sustainable Travel & Road Safety
Encourage Southwark staff to walk or cycle in the Borough		Promote the Authority's Travel Plan encouraging staff to walk or cycle in the Borough & provide access to cycles for staff	Increase the number of staff walking or cycling each year	NO ₂ , PM & CO ₂	Chief Executive	Facilities Management	
Encourage employees of businesses in Southwark to commute by foot or cycle		Encourage a employees of businesses in Southwark walk or cycle through the promotion of business specific Travel Plans	The result of the annual survey shows an increase in the number of people walking or cycling for their commute	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy	
Encourage residents to walk or cycle in the Borough		Promote active travel through relevant public health work streams and services including physical activity and healthy weight	Measures to increase active travel included in all relevant new public health strategies, action plans and events	NO ₂ , PM & CO ₂	Children and Adults Services	Public Health	

Section 3- Public Health Education and Awareness

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
3 – 5	Increase public awareness of air quality forecasting and avoidance of high levels of pollutants	Public aware of how to access airTEXT and Walk it apps	Promotion of availability of airTEXT and Walkit apps	Plan for awareness raising programme to be devised by April 2018	Protect individual health	Children and Adults Services	Public Health
3 – 6	Health Intelligence	Actions to reduce the health impact of poor air quality are evidence based and in line with national and regional policy	Public Health to provide expertise and intelligence relating to the health impacts of poor air quality in the Borough	Public Health involved in planning all air quality projects and initiatives.	Protect individual health	Children and Adults Services	Public Health
3 – 7	Web information on air quality	Southwark website has comprehensive information and appropriate guidance on air quality issues	Keep web-based information accurate and up to date	Annual review of air quality webpages content	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection & Public Health
3 – 8	Increase awareness of air quality issues	Public and businesses aware of the impact of their actions on air quality	Communication campaign on personal and business behaviour change to improve air quality	Initiate annual season-relevant campaign	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection, Public Health & Comms

Section 3- Public Health Education and Awareness

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
3 – 9	Protect vulnerable groups from poor air quality	Ensure vulnerable persons get comprehensive advice on reducing personal exposure to atmospheric pollutants	Work with clinicians via Breathlessness Group of CCG to ensure GPs have access to appropriate prompts, advice and information for use in surgery	GPs have access to appropriate prompts, advice and information for use in surgery	Protect individual health	Environment & Leisure	Environmental Protection & Public Health

Section 4 – Cleaner Transport

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
4 – 1	Promote the use of alternative fuels	Increase the use of the alternative fuel infrastructure	Provision of alternative fuel infrastructure information on Southwark web-pages	To provide information and review it annually	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
4 – 2	Reducing Emissions from Delivery and Servicing	Develop a freight consolidation solution for Southwark	Carry out a joint feasibility study with Lambeth, Wandsworth and Croydon	Feasibility study to be completed by March 2017	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
			Providing the feasibility study is positive, implement the preferred solution	Monitor the development of any preferred solution	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
				Evaluate the preferred freight consolidation solution by March 2019	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
4 – 3		All Southwark Council suppliers to use the proposed freight consolidation solution where possible	Ensure in-contract documentation that all Southwark Council suppliers are required to use any implemented consolidation solution	100% of suppliers, that can use the approved freight consolidation solution, using it	NO ₂ , PM & CO ₂	Finance & Governance	Procurement

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Section 4 – Cleaner Transport

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
4 – 4	Reducing Emissions from Delivery and Servicing	All non consolidation solution suppliers to the authority with a large fleet to join the Fleet Operator Recognition Scheme (FORS) and obtain Silver accreditation as a minimum	Within the contract documentation that all suppliers of large fleet are required to be Silver accreditation of the Fleet Operator Recognition Scheme (FORS) to be achieved within six months of the contract being signed.	100% of all suppliers to the authority	NO ₂ , PM & CO ₂	Finance & Governance	Procurement
4 – 5		To support sustainable logistical measures in the north of the Borough.	Work with TfL to promote the combination and rationalisation of deliveries using low & zero emission vehicles and local distribution hubs for final stage delivery in the Bankside, Borough and London Bridge areas	Reduced mileage delivery	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
4 – 6		Virtual Loading bays and priority loading by ultra-low emission delivery vehicles	Explore if virtual loading bays can be implemented within the Borough	Produce a feasibility report identifying where virtual loading bays could work	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
	Implement feasible virtual loading bays in the borough	NO ₂ , PM & CO ₂		Chief Executive	Transport Policy		

Section 4 – Cleaner Transport

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
4 – 7	Reducing Emissions from Delivery and Servicing	Reduce Southwark fleet emissions by reducing total mileage	Undertake an annual survey of the mileage of the fleet	Reduction in business mileage year on year.	NO ₂ , PM & CO ₂	Environment & Leisure	Fleet Services
			Produce mileage and efficiency guidance for services	Guidance to be produced by end of 2017	NO ₂ , PM & CO ₂	Environment & Leisure	Fleet Services
			Introduction of telematics on commercial fleet	Telematics installed on 100% of fleet by 2020	NO ₂ , PM & CO ₂	Environment & Leisure	Fleet Services
4 – 8		Smarter Driver Training for drivers of all fleets used by the Authority	Introduce Smarter Driver training requirement for all fleet drivers	All current staff to undertake Smarter Driver training by December 2018	NO ₂ , PM & CO ₂	Environment & Leisure	Fleet Services
				All new staff to receive the training within six months of commencement of their employment	PM & CO ₂	Environment & Leisure	Fleet Services
4 – 9	Travel Planning	Maintain an up to date Council Travel Plan consistent with the aims of the air quality action plan	Undertake survey of staff travel arrangements	Undertake a staff survey in respect of the Authority's Travel Plan bi-annually	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy

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Section 4 – Cleaner Transport

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
4 – 10	Travel Planning	Maintain an up to date Council Travel Plan which is consistent with the aims of the air quality action plan	Review the Authority's Travel Plan	Undertake a bi-annual review of the Authority's Travel Plan	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
4 – 11	Reducing emissions from Taxis & Private Hire Vehicles	Lobby TfL to promote Smarter Driver Training for drivers of all taxis and private hire vehicles.	Lobby the GLA and TfL to introduce a requirement that all PCO licences include an Smarter Driver training element	Smarter Driver Training element is introduced and GLA / TfL have produced a target for existing and new drivers to be trained.	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
4 – 12	Reducing vehicle emissions	Work with TfL to reduce emissions from buses in the borough	Engage with TfL and GLA to promote the use of low emission buses on all routes in the Borough	Increase percentage of routes with low emission vehicles year on year	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
4 – 13		Work with TfL and other London Boroughs to review the extension of the Ultra-Low Emission Zone to the South Circular	Engage with TfL and GLA on the potential air quality benefits of extending the ULEZ to the south circular	Annual review	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy

Section 4 – Cleaner Transport

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
4 – 14	Reducing Vehicle Emissions	Work with the appropriate industries to reduce fine particle emissions from tyre, brake and clutch components	Engage with the appropriate universities and industries to reduce fine particle emissions from tyre, brake and clutch components	3 articles published in trade or academic press	PM	Environment & Leisure	Environmental Protection
4 – 15	Increase public transport facilities in the Borough	To increase public transport links in the Borough	Attendance at all relevant meetings with TfL, maintain record of discussions/minutes of meetings	Increased no. of buses, bus routes and underground stations. 100% of meeting minutes recorded	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
4 – 16	Extension of the Bakerloo Line in the Borough	To extend Bakerloo line to Lewisham	Attendance at all relevant meetings with TfL, maintain record of discussions/minutes of meetings	Increased no. of underground stations. 100% of meeting minutes recorded	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
4 – 17	Anti-idling campaign	Vehicle compliance with the Road Traffic Act anti idling provisions	Ensure all sectors of the population in the Borough have awareness of the anti-idling legislation	Annual campaign	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection & Comms
4 – 18	Emissions of vehicles	Enforcement of the provisions of the Road Traffic Act	Use of the vehicle idling powers	Train all JET officers in Road Traffic Act anti-idling enforcement	NO ₂ , PM & CO ₂	Environment & Leisure	Joint Enforcement Teams

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Section 5 – Reducing Carbon

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations/ benefit	Directorate	Delivered by Lead Service Area / Team
5 – 1	Reduction of carbon emissions	Require developers to contribute to reducing atmospheric emissions	Achieve minimum 35% regulated carbon emissions reduction on Part L of 2013 Building regulations on all new major developments	100% of relevant major planning applications meet policy target	PM & CO ₂	Chief Executive	Development Management
5 – 2			Any of the 35% minimum CO ₂ reduction not achieved on-site to be secured through S106 for the “Green Fund” (carbon off-setting projects) for the equivalent remaining regulated carbon emission savings	100% of major planning applications not meeting the 35% minimum CO ₂ reduction on-site to address remaining emissions through off-setting funds secured through S106	PM & CO ₂	Chief Executive	Development Management
5 – 3			New homes on all major developments to be zero carbon as per London Plan policy 5.2, achieved either on-site or via financial contributions for off-setting	100% of money secured allocated to carbon off-setting projects	PM & CO ₂	Chief Executive	Development Management
5 – 4			All major developments to achieve Air Quality Neutral Standards onsite	100% of major developments to achieve Air Quality Neutral standards	NO ₂ , PM & CO ₂	Chief Executive	Development Management

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Section 5 – Reducing Carbon

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
5 – 5	Reduction of carbon emissions	Require developers to contribute to reducing atmospheric emissions	Where Air Quality Neutral standards not achieved on-site, off-setting funds secured through section 106 which meets the equivalent air quality neutral standard	100% of major planning applications not meeting the on-site Air Quality Neutral standard secure remaining requirement through off-setting funds through S106	NO ₂ , PM & CO ₂	Chief Executive	Development Management
5 – 6			Commit and spend all offsetting funds on carbon offsetting projects	All monies secured for carbon off-setting purposes is monitored and reported	PM & CO ₂	Chief Executive	Development Management
5 – 7	Improve the energy efficiency in Southwark homes	Promote reduced energy consumption and bills	Promote low cost energy efficiency measures	2 articles per year promoting energy reduction measures	NO ₂ , PM & CO ₂	Housing	Major projects
5 – 8		Maximise funding streams available to improve energy efficiency	Bid for funding where funding will be beneficial to energy efficiency and fit in with the overall council objectives	Report on funding received and utilised	NO ₂ & CO ₂	Housing	Major Projects
5 – 9		Install ultra-low NO _x boilers in council & TMO housing	Install ultra-low NO ₂ boilers when boilers are replaced in council and TMO housing	Install 1600 ultra-low NO ₂ boilers/year	NO ₂ & CO ₂	Housing	Major Projects

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Section 5 – Reducing Carbon

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations/ benefit	Directorate	Delivered by Lead Service Area / Team
5 – 10	Improve the energy efficiency in Southwark homes	Develop a strategy for communal boiler upgrades and renewals within council housing	Implement the strategy for communal boiler upgrades and renewals	Strategy approval and subsequent progress	NO ₂ & CO ₂	Housing	Major Projects
5 – 11		Monitor the effect of energy efficiency improvements in the Council's social housing planned renewal programme	Implement improvement programme in the social housing planned works programme	Baseline SAP score in 2017 /18 and monitor the changes through the investment programme annually	NO ₂ & CO ₂	Housing	Major Projects
5 – 12	Promoting the use of renewable energy and minimise the energy demand of Southwark estate	Reorganise the use of space in operational council buildings to reduce overall energy demand	Improve the use of Council buildings making them more sustainable, flexible, cost and space efficient	Baseline study in 2017 /18 and monitor the changes through the new Modernise Strategy annually	NO ₂ & CO ₂	Chief Executive	Facilities Management
5 – 13		Be aware of the energy used and generated by the Authority's operational buildings	Publish online information of the energy used and any generated by the Authority's operational buildings	Web based information available to public	N / A	Environment & Leisure	Service Development

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Section 5 – Reducing Carbon

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations/ benefit	Directorate	Delivered by Lead Service Area / Team
5 – 14	Promote the use of renewable energy and minimise the energy demand of Southwark Housing	Explore the opportunity to install renewable energy technologies in Southwark housing (e.g. solar panels)	Through extra funding, explore the opportunity of installing renewable energy technologies and retrofitting insulation and energy efficiency measures	Explore all available opportunities	NO ₂ , PM & CO ₂	Housing	Major Projects
5 – 15	Ensuring new developments minimise their impact on local air quality and climate change	Develop robust planning policies on air quality	Develop robust planning policies in the New Southwark Plan (NSP) and Old Kent Road Area Action Plan (OKR AAP)	Adopt policies on air quality in NSP and OKR AAP	NO ₂ , PM & CO ₂	Chief Executive	Planning Policy
5 - 16		Highlight design guidance for best practice in reducing emissions to air	Develop a revised Sustainable Design and Construction SPD that includes up to date guidance on improving air quality	Revised Sustainable Design and Construction SPD is adopted	NO ₂ , PM & CO ₂	Chief Executive	Planning Policy
5 - 16	Increase number of Southwark Council Homes using renewable energy	Increase no of Southwark Council Homes using renewable energy from SELCHP	Connect more dwellings to SELCHP	Increase no. of homes connected to SELCHP by 50%	NO ₂ , PM & CO ₂	Housing	Major Projects

Section 6 – Regulation

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
6 - 1	Emissions from developments and premises	Enforcement of the Clean Air Acts.	Ensure that all retail premises selling wood and coal are aware that the whole of the Borough is a Smoke Control Area	An annual enforcement campaign	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
6 - 2	Smoke Control Zone	Discourage burning of logs and house coal in the Borough	A communication campaign during the Autumn to highlight pollution caused by using non-smokeless fuels	Campaign each year until 2022	PM & CO ₂	Environment & Leisure	Environmental Protection & Comms
6 - 3	Emissions from industrial premises know to emit emissions to air	Regulation of EPA Part B processes	All IPPC premises in the Borough inspected in accordance with their risk assessment	Annual inspection of 100% of all relevant premises	NO ₂ , PM & CO ₂	Environment & Leisure	Environment Protection
6 - 4	Emissions from development	Emissions from all construction work is minimised	Ensure that all strategic and major developments are aware of the Authority's Technical Guidance for Demolition & Construction	100% of all major & strategic planning applications made aware	NO ₂ & PM	Environment & Leisure	Environmental Protection

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Section 6 – Regulation

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
6 - 5	Emissions from construction equipment	Ensure all Non Road Mobile Machinery complies with the GLA SPG construction criteria	Ensure that all strategic & major construction sites are on the on-line NRMM register	100% of all strategic and major construction sites on on-line NRMM register	NO ₂ & PM	Environment & Leisure	Environmental Protection
6 - 6			All strategic and major construction sites are inspected for NRMM compliance	100% compliance of all major & strategic construction sites	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
6 - 7	Emissions from developments and premises	Enforcement of the provisions of the Environment Protection and Clean Air Acts	Apply the provisions of Clean Air Act 1993 S.14 (chimney height.) to appropriate developments	100% of all relevant developments	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
6 - 8			Investigate reports of bonfires & open burning.	90% of reports investigated	NO ₂ , PM & CO ₂	Environment & Leisure	Noise & Nuisance
6 - 9			Ensure that there is public awareness that the Borough is a smoke control area	Annual communication campaign	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection & Comms

Section 7 – Support the GLA Air Quality Aims

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
7 - 1	GLA Air Quality Focus Areas	Target improvement of the air quality in the GLA Air Quality Focus Areas	Ensure that local air quality in the GLA Air Quality Focus Areas is monitored	100% of the Focus Areas are monitored	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
			Devise an air quality improvement project for each GLA Air Quality Focus Area	100% of the Focus Areas have an air quality improvement project	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection & Transport Policy
			Ensure that air quality projects in the GLA Air Quality Focus Areas are assessed	100% of projects are assessed	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
			Ensure that local air quality projects in the GLA Air Quality Focus Areas are adequately evaluated.	100% of the projects produce evaluation reports	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy
7 - 2	Cleaner Air Borough	Retain Cleaner Air Borough Status	Take all actions required by GLA to retain Cleaner Air Borough	Cleaner Air status retained	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
7 - 3	The extension of the ULEZ	Support the GLA and TfL to extend the ULEZ to the South Circular	Respond to all consultations	100 % of responses made within consultation period	NO ₂ , PM & CO ₂	Chief Executive	Transport Policy

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Section 7 – Support the GLA Air Quality Aims

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
7 - 4	Support GLA planning policy with regard to air quality	Ensure full consideration of GLA air quality planning policy changes	Ensure GLA air quality policy is considered in all planning decisions	100% of all applications	NO ₂ , PM & CO ₂	Chief Executive	Development Management
7 - 5	Mayor's Air Quality Action Fund	Identify projects suitable for Mayor's Air Quality funding	Review the Mayor's Air Quality funding guidance	Maximise All funding opportunities to deliver projects to improve local air quality	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
7 - 6	Clean air for Londoners	Work with the GLA & TfL and other organisations towards meeting the national air quality objectives	Review all external opportunities to participate in air quality improvement projects	All appropriate external opportunities are maximised	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection

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Section 8 – Support Public Health Objectives

Action Number	Theme / Aim	Objective	Action	Target	Expected emissions/ concentrations benefit	Directorate	Delivered by Lead Service Area / Team
8 - 1	Joint Strategic Needs Assessment	The JSNA includes Air Quality and has up to date information on health impacts	Draft the air quality section of the JSNA	JSNA section is prepared by April 2017	NO ₂ , PM & CO ₂	Children and Adults Services	Public Health
			Produce the air quality section of the JSNA	JSNA section is ratified by June 2017	NO ₂ , PM & CO ₂	Children and Adults Services	Public Health
			Review the air quality section of the JSNA bi-annually	JSNA air quality section updated bi-annually	NO ₂ , PM & CO ₂	Children and Adults Services	Public Health
8 - 2	Air Quality & Public Health	Retain local air quality as a public health priority	Provide up to date information in connection with air quality	Provide updates to the lead member and Health and Well-being board	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection
8 - 3	Embedding Air Quality Policy	Ensure that Air Quality is considered within all relevant complementary council policy developments	All relevant new policies to incorporate air quality aims	All new policies include relevant air quality aims	NO ₂ , PM & CO ₂	Chief Executive	Relevant operational service areas
8 - 4	Air Quality Alerts	Provide air quality alert information to Southwark's vulnerable persons and those caring for them	Staff cascade for air quality alerts and advice	Implement by April 2017	NO ₂ & PM	Environment & Leisure	Environmental Protection
8 - 5	Air Quality Projects in the Borough	To identify external funding and deliver projects to improve air quality in Borough	Review all external funding opportunities to fund air quality improvement projects	All appropriate external funding opportunities are maximised	NO ₂ , PM & CO ₂	Environment & Leisure	Environmental Protection, Public Health & Transport Policy

Technical Appendices

The appendices are in a separate document accessible on the Southwark website at www.southwark.gov.uk/airquality . Below is the list of technical appendices available.

Appendix 1 – Air Quality Objectives

Appendix 2 – Health Impacts of Air Pollution

Appendix 3 – Air Quality Monitoring & Modelling Results

Appendix 4 – Emission Sources / Source Apportionment

Appendix 5 – Glossary

Contact	Environmental Protection Team Regulatory Services 3 rd Floor, Hub 1 P.O. Box 64529 London SE1P 5LX
Telephone	020 7525 4261
Email	environmental.protection@southwark.gov.uk
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Air Quality Action Plan Technical Appendices

December 2016

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Appendix 1 – National Air Quality Objectives

The air quality objectives applicable to London are set out in the Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043), and are shown in Table 1. This table shows the objectives in units of micrograms per cubic metre $\mu\text{g.m}^{-3}$ and for carbon monoxide in units of milligrams per cubic metre mg.m^{-3} . The number of exceedences in each year that are permitted are also listed where applicable).

Table 1 Air Quality Objectives included in Regulations for the purpose of London Local Air Quality Management in London

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 $\mu\text{g.m}^{-3}$	Running annual mean	31.12.2003
	5.00 $\mu\text{g.m}^{-3}$	Annual mean	31.12.2010
1,3-Butadiene	2.25 $\mu\text{g.m}^{-3}$	Running annual mean	31.12.2003
Carbon monoxide	10 mg.m^{-3}	Running 8-hour mean	31.12.2003
Lead	0.50 $\mu\text{g.m}^{-3}$	Annual mean	31.12.2004
	0.25 $\mu\text{g.m}^{-3}$	Annual mean	31.12.2008
Nitrogen dioxide	200 $\mu\text{g.m}^{-3}$ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 $\mu\text{g.m}^{-3}$	Annual mean	31.12.2005
Particulate Matter (PM ₁₀) (gravimetric)	50 $\mu\text{g.m}^{-3}$, not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 $\mu\text{g.m}^{-3}$	Annual mean	31.12.2004
Sulphur dioxide	350 $\mu\text{g.m}^{-3}$, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 $\mu\text{g.m}^{-3}$, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 $\mu\text{g.m}^{-3}$, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

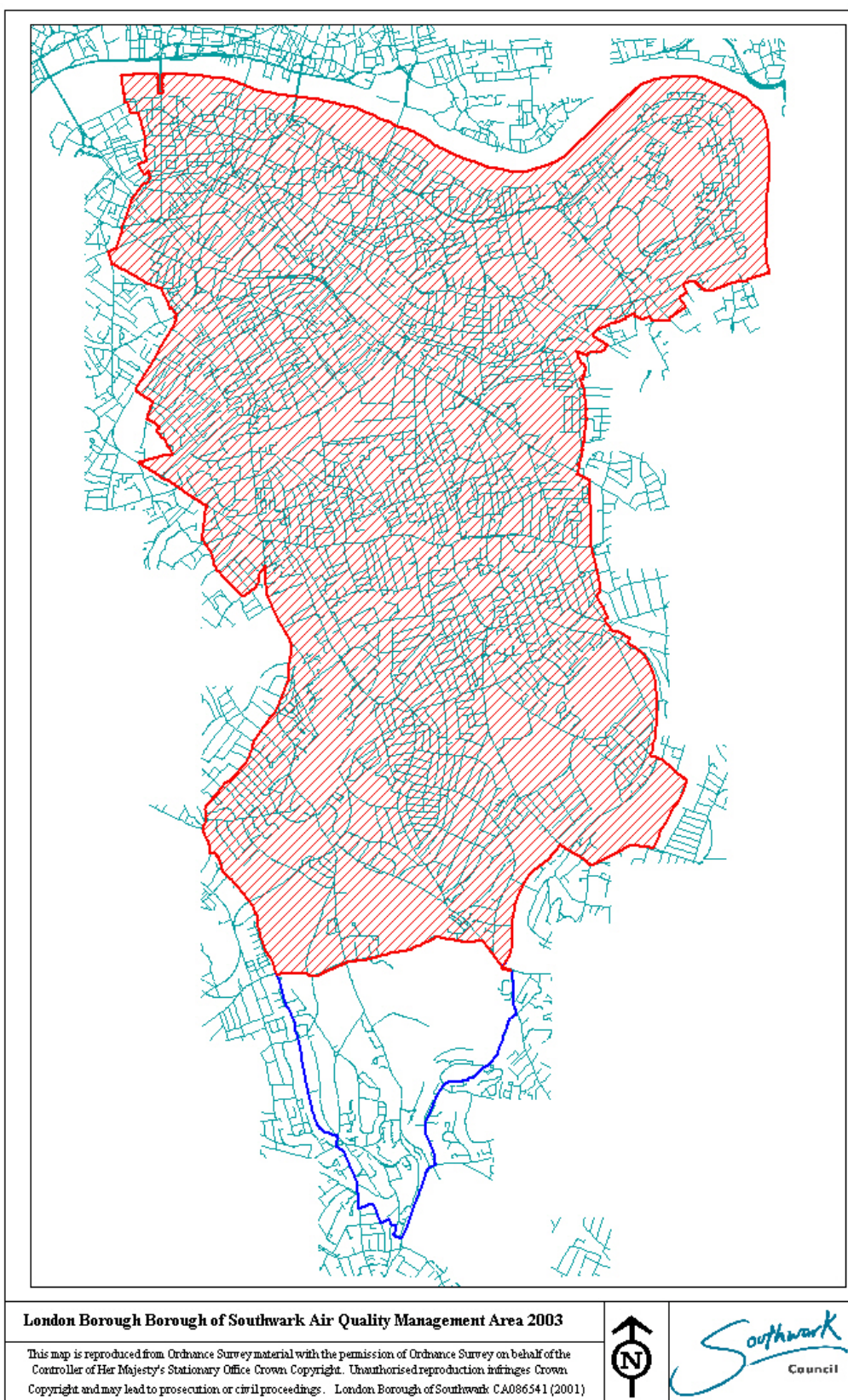


Figure 1

Map of Air Quality Management Area in the L.B. Southwark

Appendix 2 – Health Impacts of Air Pollution

Introduction

The health impacts of air pollution are varied, ranging from coughing, worsening of asthma, changes in lung function, increased hospital admissions for respiratory and cardiovascular disease and death.

Meta analysis of several studies provides the evidence of a statistically significant effect. This meta analysis also provides an estimate of the magnitude of the effect. The results are usually expressed as a proportional increase in effects for a $10\mu\text{g.m}^{-3}$ change in exposure. For an example, the overall increase in all-cause deaths from an increase in exposure to $\text{PM}_{2.5}$ is 6% per $10\mu\text{g.m}^{-3}$ change in the annual mean concentration.

In March 2015 the Committee on the Medical Effects of Air Pollutants concluded there is evidence of association of ambient concentrations of NO_2 with a range of effects on health. Studies have shown that to some extent, NO_2 acts as a marker for the effects of other traffic-related pollutants. The epidemiological and mechanistic evidence now suggests that it would be sensible to regard NO_2 as causing some of the health impact found to be associated with it in epidemiological studies.

In July 2015 King's College London calculated that the total mortality burden of long-term exposure to NO_2 is estimated to be up to 88,113 life-years lost, equivalent to 5,879 deaths at typical ages (assuming the WHO value of up to a 30% overlap between the effects of $\text{PM}_{2.5}$ and NO_2). Some of this effect may be due to other traffic pollutants. The total mortality burden of anthropogenic $\text{PM}_{2.5}$ for the year 2010 is estimated to be 52,630 life-years lost, equivalent to 3,537 deaths at typical ages. The total mortality burden in 2010 from $\text{PM}_{2.5}$ and NO_2 can be added to give a range from the 52,630 life-years lost, equivalent to 3,537 deaths at typical ages from $\text{PM}_{2.5}$ alone (if only including the most established effects) to as much as 140,743 life-years lost, equivalent to 9,416 deaths at typical ages (assuming a 30% overlap between the effects of $\text{PM}_{2.5}$ and NO_2 and comparing with a zero concentration of NO_2).

A study in East London¹ found that traffic-related air pollutants have adverse effects on respiratory and allergic symptoms in school children in the area. This study also demonstrated that was a reduction of lung Forced Vital Capacity with increased exposure to traffic derived pollutants.

¹ Wood HE, Marlin N, Mudway IS, Bremner SA, Cross L, Dundas L. et al. (2015) Effects of air pollution and the Introduction of the Low Emission Zone on Prevalence of Respiratory and Allergic Symptoms in Schoolchildren in East London: A Sequential Cross-Sectional Study. Plos One 10(8): e0109121. Doi 10.1371/journal.pone.0109121

The table below shows the summary of the sources and impact of pollutants found in an urban area.

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 brake wear), 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

Appendix 3 – Air Monitoring & Modelling Results

Introduction

This section presents the historical and up to date data from the continuous monitoring stations within the Southwark area for Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀). The Authority does not present monitor for PM_{2.5} so the average data for all of the London sites has been presented.

After the monitoring data section, there are the modelled annual means for NO₂, PM₁₀ & PM_{2.5} concentrations for the Greater London Area in 2013 maps. The following maps show the modelled annual mean concentrations for 2013 for the Borough.

The final part of this appendix outlines the GLA focus areas in the Greater London and in the Southwark and the areas which are on the border of the borough.

Nitrogen Dioxide

Site ID	Site type	Valid data capture for monitoring period % ^a	Valid data capture 2015 % ^b	Annual Mean Concentration (µg.m ⁻³)						
				2009	2010	2011	2012	2013	2014	2015
SWK1 ²	Urban Background	N / A	N / A	49 (44%)	N / A	N / A	N / A	N / A	N / A	N / A
SWK5	Roadside	69	69	N / A	N / A	46 (73%)	52 (80%)	55 (>90%)	38 (32%)	42 (69%)
SWK6	Urban Background	80	80	N / A	N / A	N / A	N / A	42 (85%)	37 (84%)	41 (80%)
CP1 ³	Roadside	N / A	N / A	49 (93%)	47 (56%)	N / A	N / A	N / A	N / A	N / A

Table 2 Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results (µg.m⁻³)

Notes: Exceedence of the NO₂ annual mean AQO of 40µg.m⁻³ are shown in **bold**.

NO₂ annual means in excess of 60µg m⁻³, indicating a potential exceedence of the NO₂ hourly mean AQS objective are shown in bold and underlined.

The above data shows that at both stations the annual mean concentration is exceeding the objective of 40µg.m⁻³ since 2011. The trends for the monitoring stations in the Southwark area can be seen in Figure 2 below.

² This air quality monitoring station was situated at Larcom Street, this station closed in June 2009, due to the council building being disposed off

³ This air quality monitoring station was installed by a collaboration of Local Authorities (L.B. Bromley, L.B. Croydon L.B. Lambeth, L.B. Lewisham and L.B. Southwark). This station was closed in July 2010 due to reduction in resources to the Local Authorities.

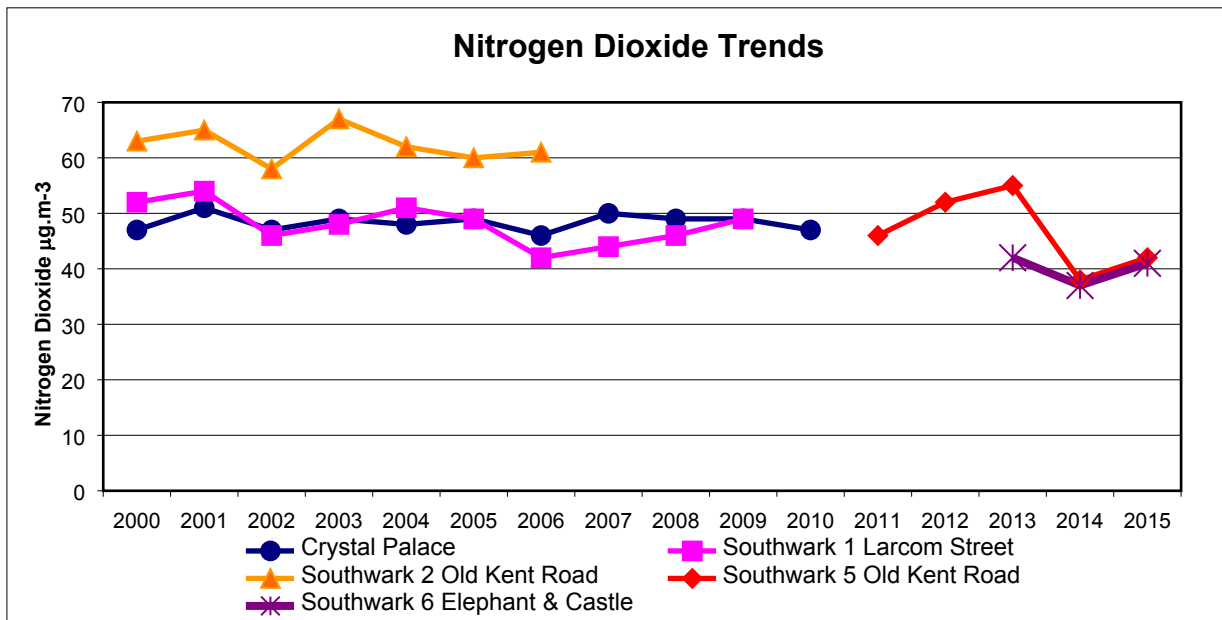


Figure 2 Trends in Annual Mean NO₂ Concentrations at the Borough’s Automatic Monitoring Sites

Figure 3 below shows the mean results from all roadside and background monitoring stations within the London Air Quality Network⁴. This shows that the trend for the background sites is showing a gradual reduction to below the objective. However the roadside locations are not reducing and exceed the objective in the region of 7µg.m⁻³ to 20µg.m⁻³.

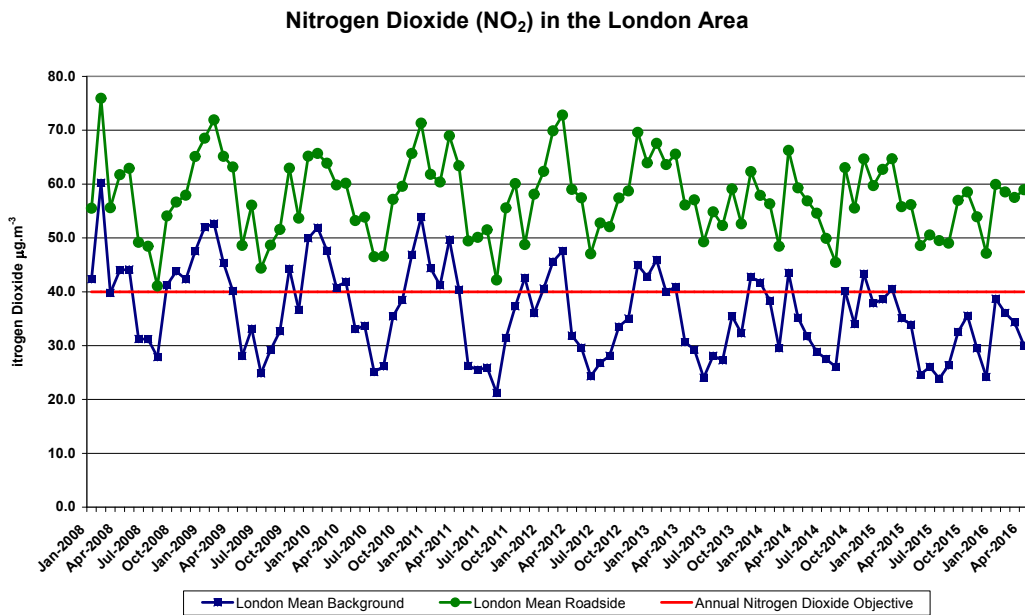


Figure 3 Trends of the monthly mean Nitrogen Dioxide concentrations at roadside and background sites in the London area

⁴ London Datastore - London Average Air Quality Levels accessed at <http://data.london.gov.uk/dataset/london-average-air-quality-levels>

Particulate Matter (PM₁₀)

Table 3 Annual Mean PM₁₀ Automatic Monitoring Results (µg m⁻³)

Site ID	Valid data capture for monitoring period %	Valid data capture 2015 %	Annual Mean Concentration (µg.m ⁻³)						
			2009	2010	2011	2012	2013	2014	2015
SWK1	N / A	N / A	22 (44%)	N / A	N / A	N / A	N / A	N / A	N / A
SWK5	60	60	N / A	29 (8%)	27 (80%)	25 (82%)	30 (85%)	23	21
SWK6	77	77	N / A	N / A	N / A	N / A	23 (80%)	19	20
CP1	N / A	N / A	24(80%)	23 (55%)	N / A	N / A	N / A	N / A	N / A

Notes: Exceedence of the PM₁₀ annual mean AQO of 40µgm⁻³ are shown in **bold**.

The PM₁₀ annual mean concentrations at the monitoring stations have met the national air quality objectives. The downward trend of the PM₁₀ annual mean concentrations at the monitoring stations is shown in Figure 4. The trends for all the London Air Quality Network roadside and background monitoring stations can be seen in Figure 5, this shows that concentrations are generally below the objective level.

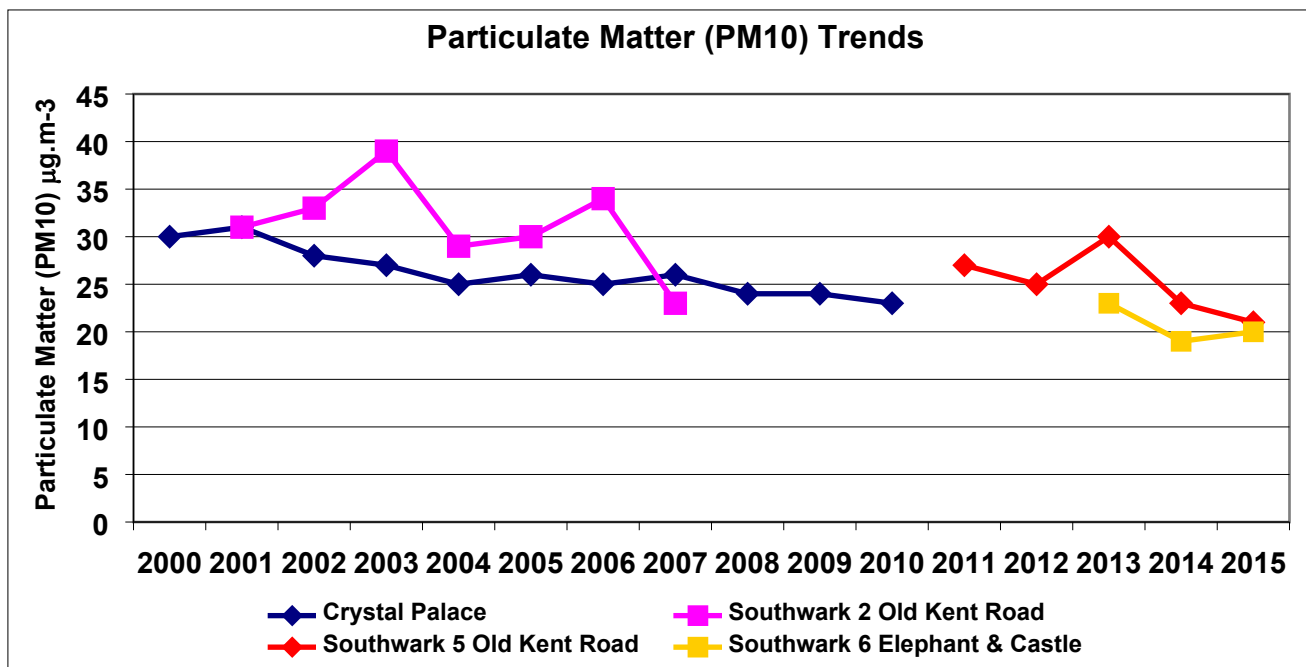


Figure 4 Trends in Annual Mean PM₁₀ Concentrations of the Authority's PM₁₀ monitoring stations

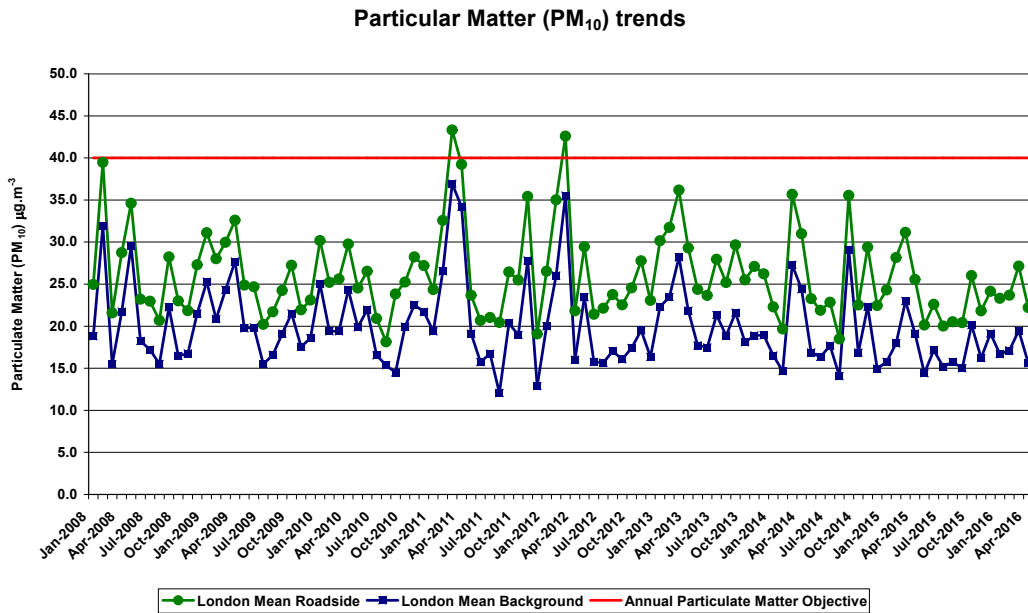


Figure 5 Trends of the monthly mean Particulate Matter (PM10) concentrations at roadside and background sites in the London area.

Particulate Matter (PM_{2.5})

The London Borough of Southwark does not monitor for PM_{2.5} in the Borough. Figure 6 shows the concentrations of all the PM_{2.5} roadside and background monitors in the London Air Quality Network. There appears to be a downward trend in the measured concentrations.

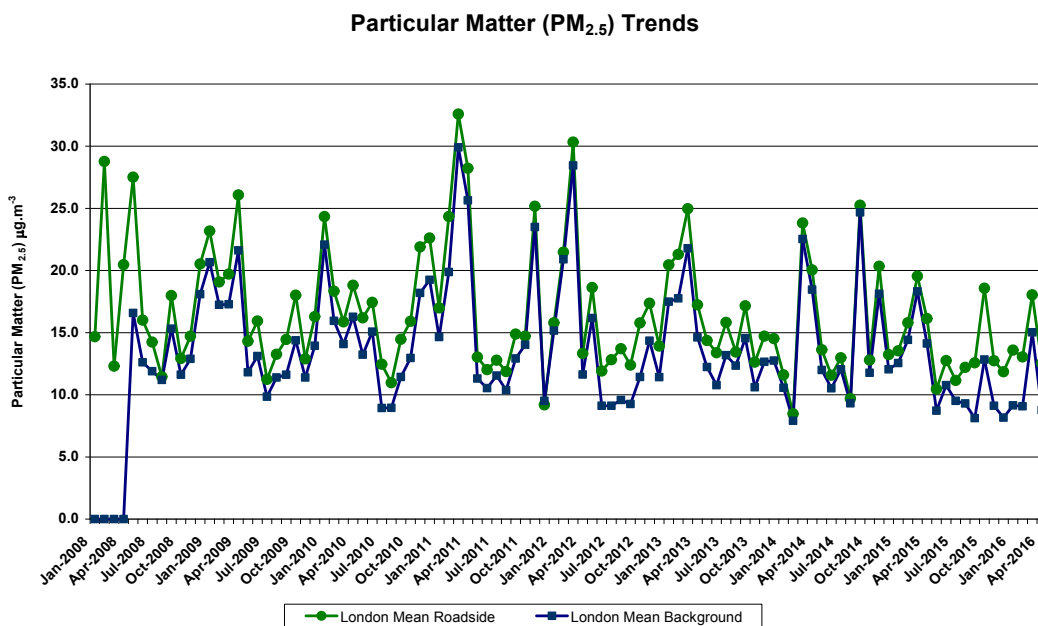
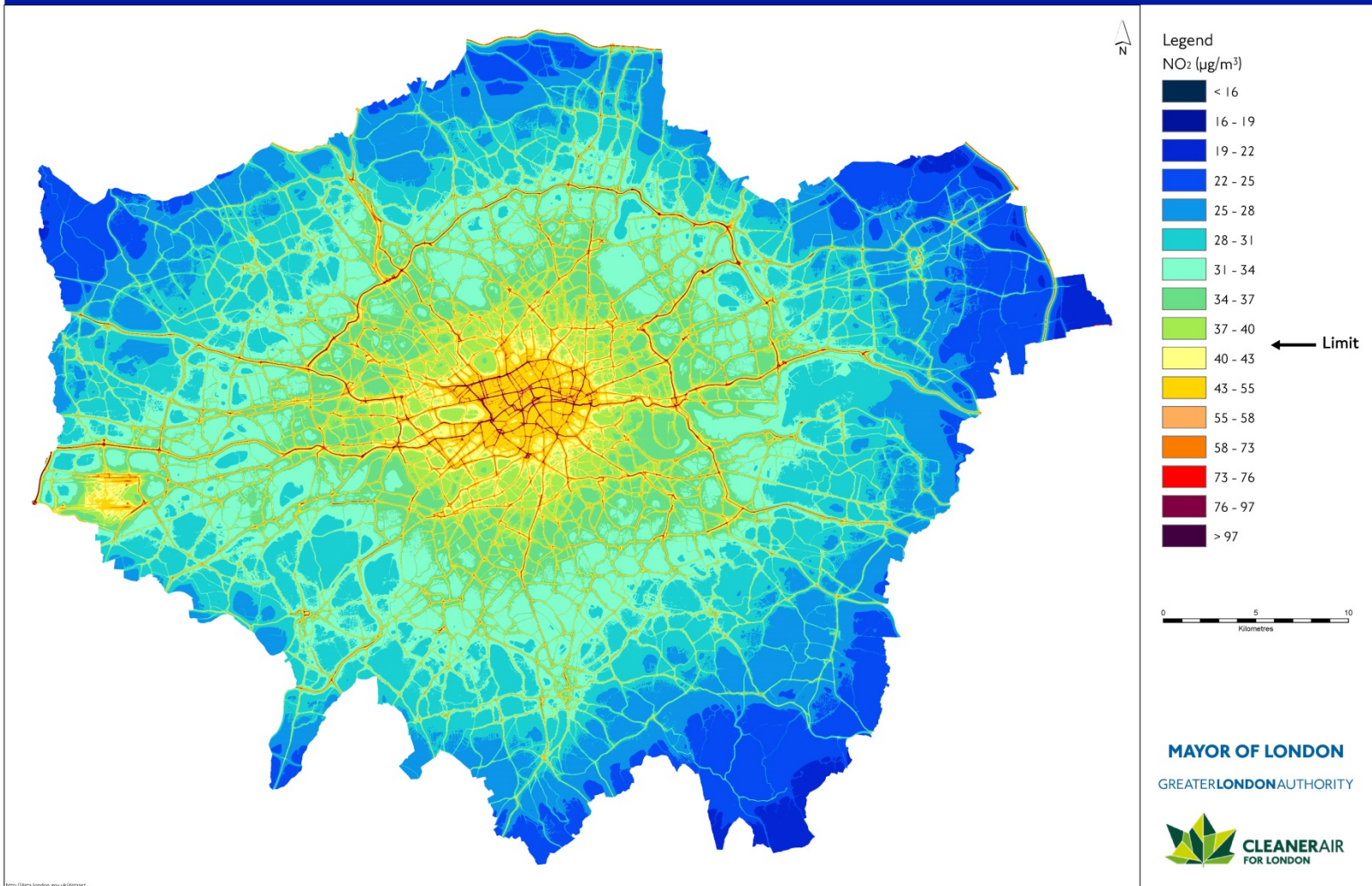
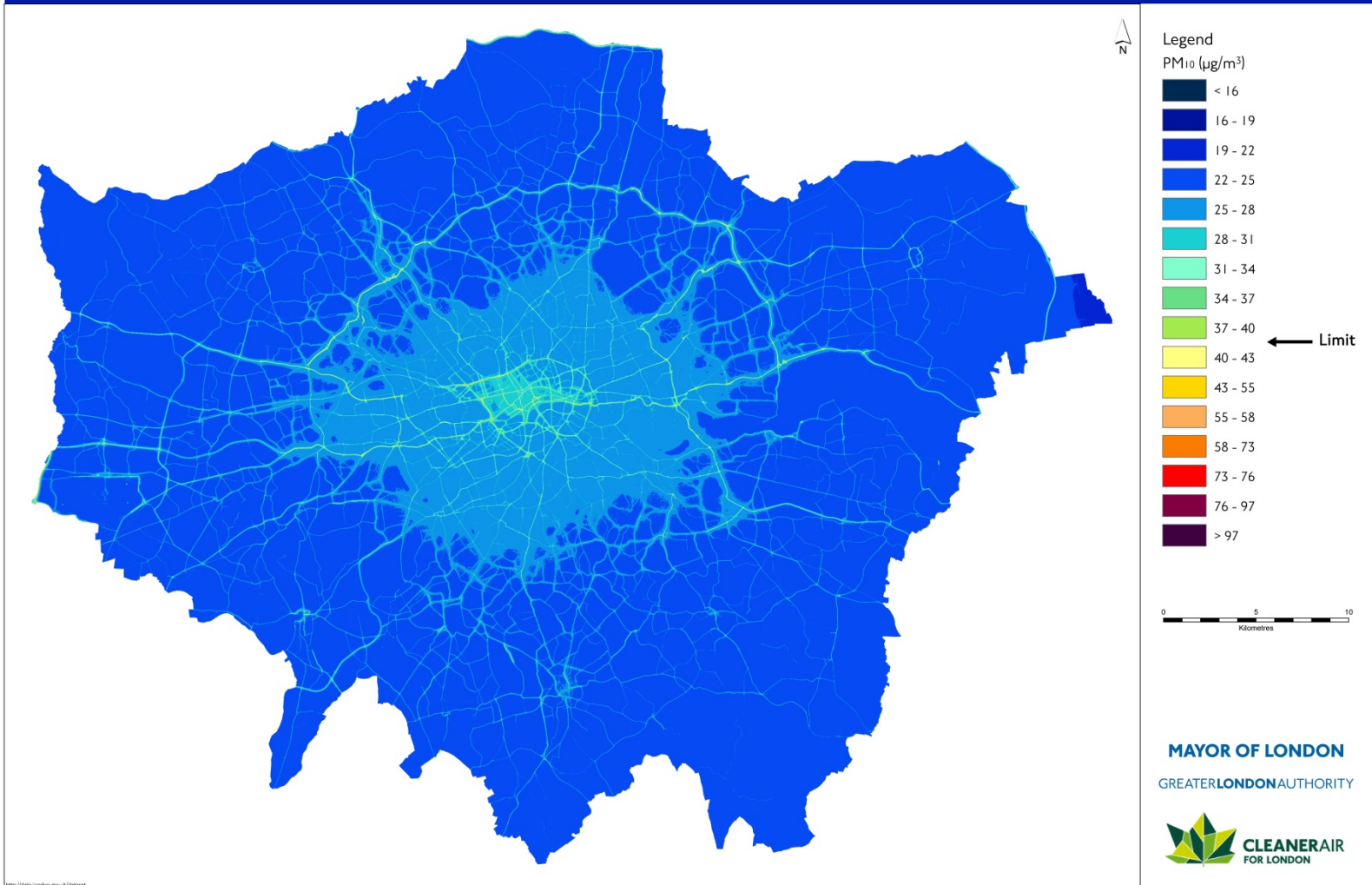
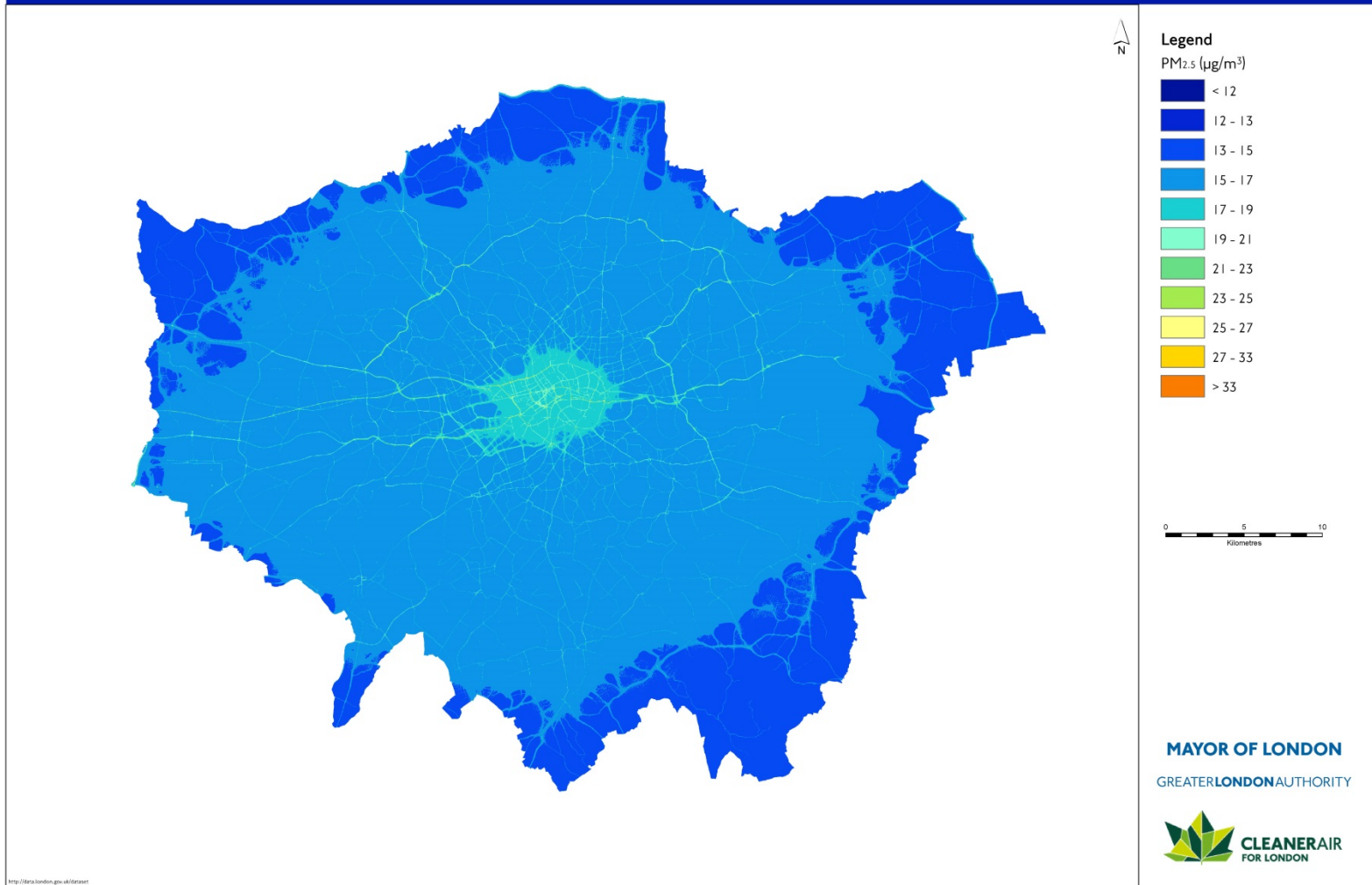


Figure 6 Trends of the monthly mean Particulate Matter (PM_{2.5}) concentrations at roadside and background sites in the London area.

Source GLA accessed at <http://data.london.gov.uk/dataset/london-average-air-quality-levels>

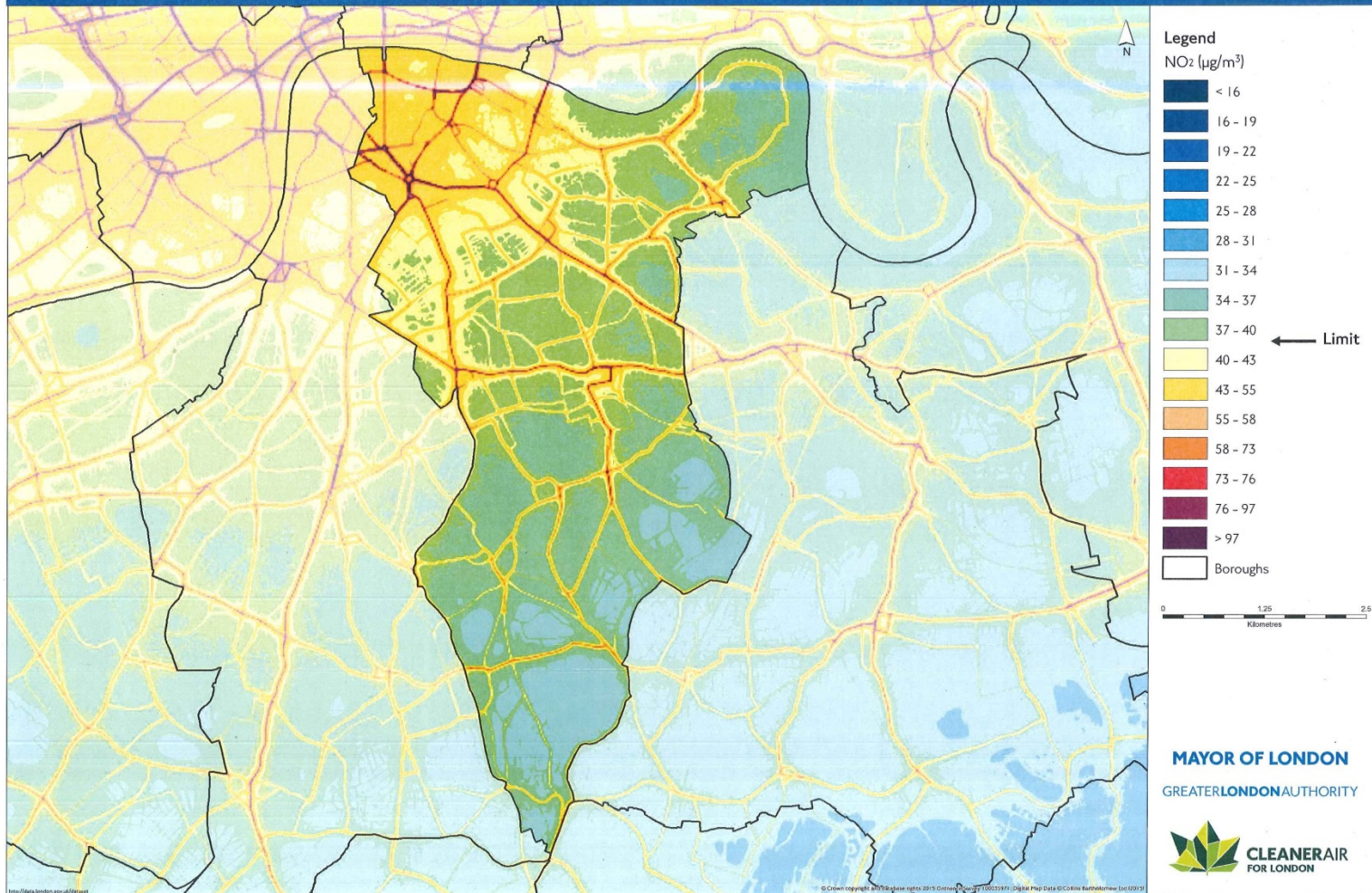






London Borough of Southwark
Annual Mean NO₂ concentrations 2013

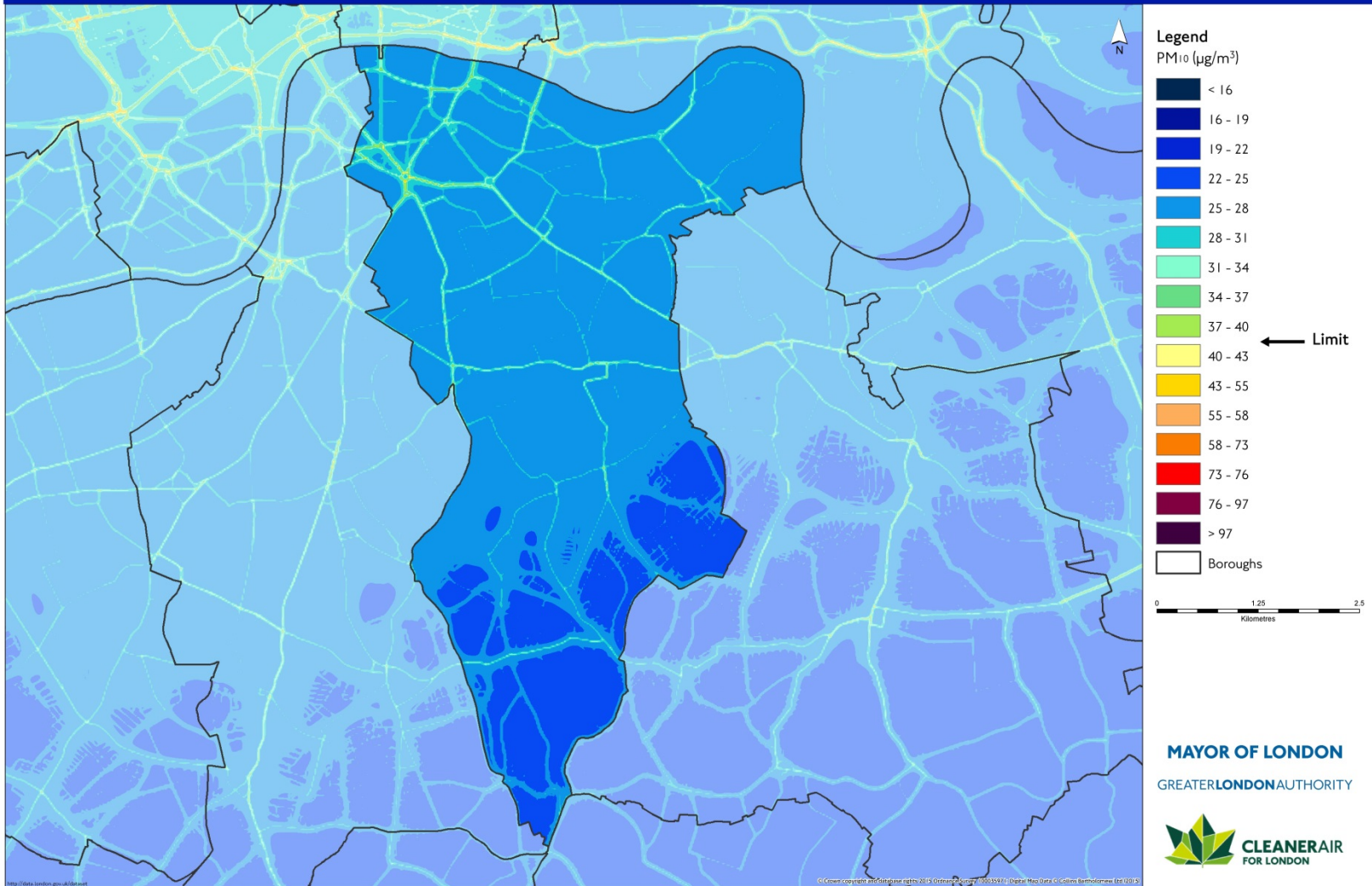
LAEI 2013



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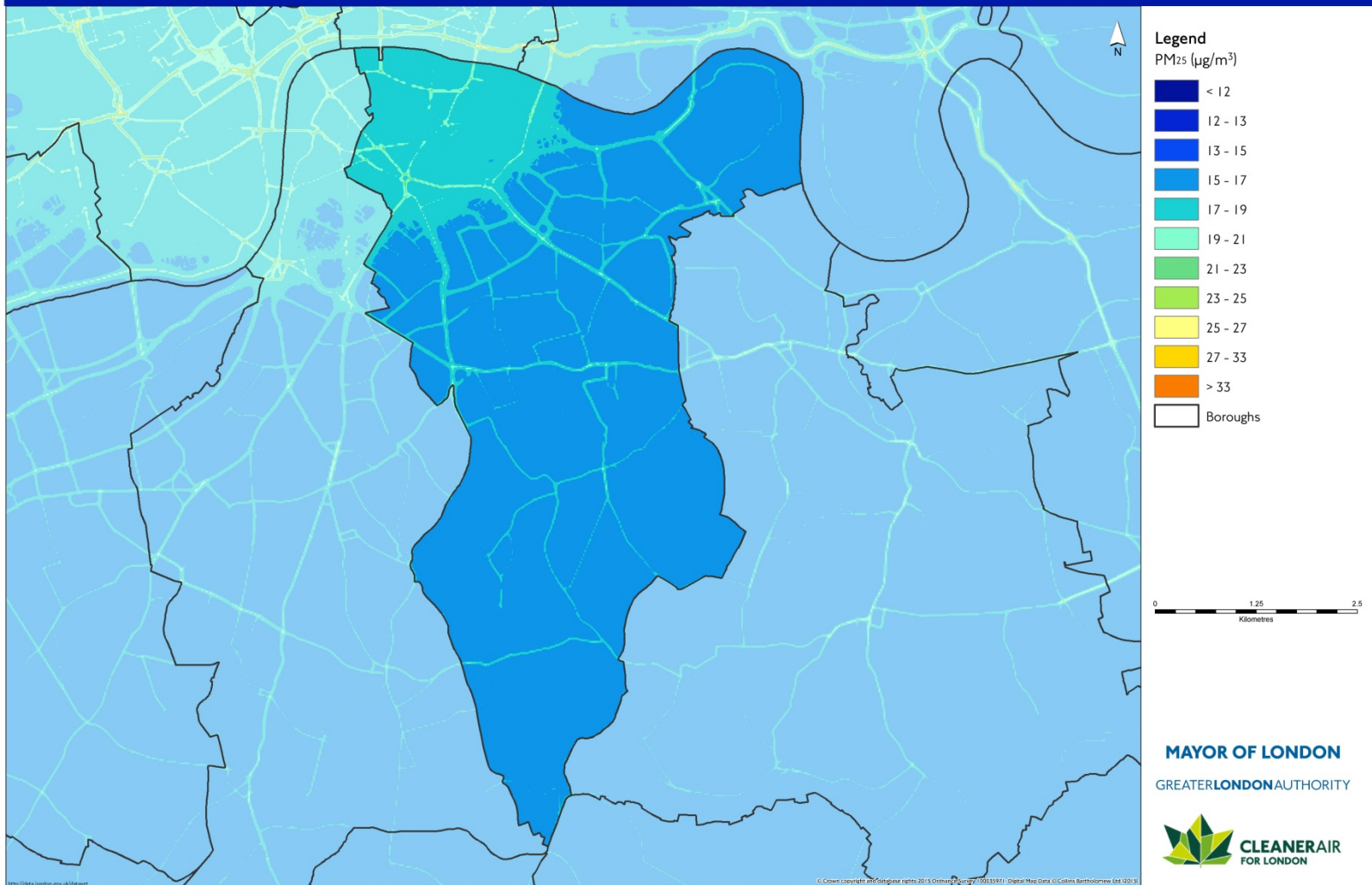
London Borough of Southwark
Annual Mean PM₁₀ concentrations 2013

LAEI 2013



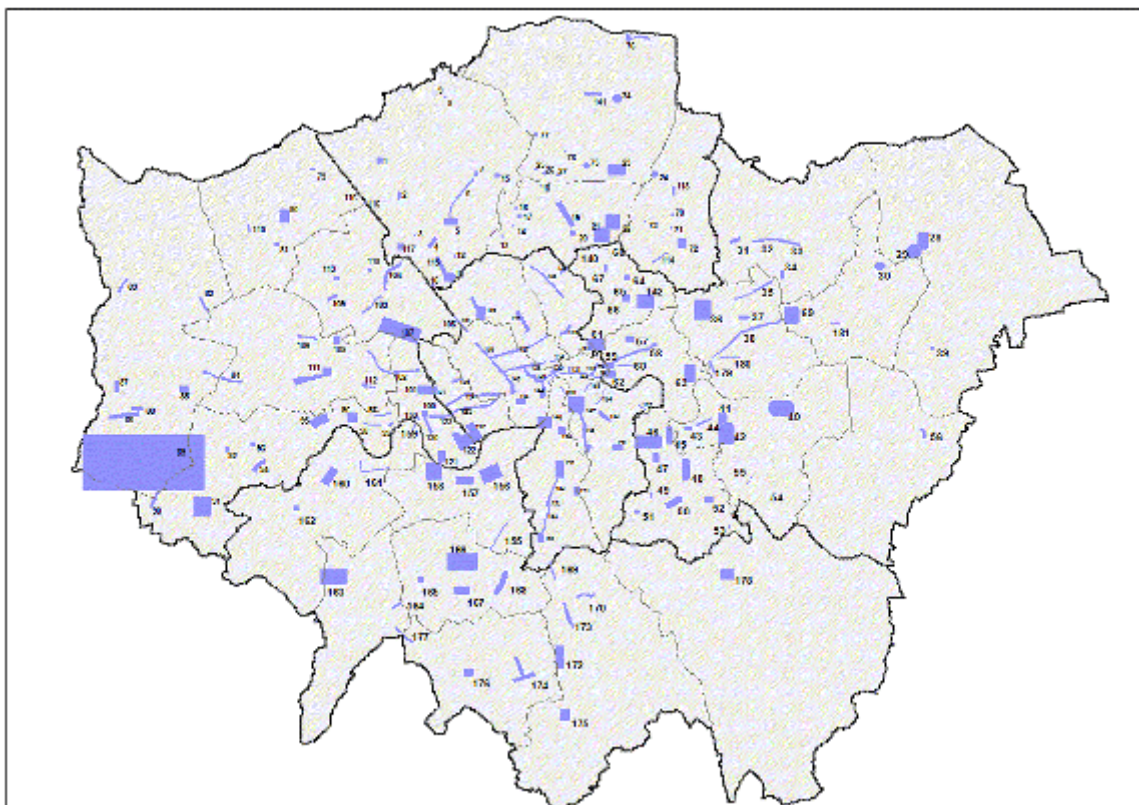
London Borough of Southwark Annual Mean PM_{2.5} concentrations 2013

LAEI 2013



GLA Air Quality Focus Areas for the Greater London Area.

The London Mayor has introduced a number of Air Quality Focus Areas⁵ in the Greater London area. See map below.



The process of how the Mayor of London developed these focus areas can be found [here](#)

Within Southwark the following areas in have been designated Air Quality Focus Areas by the GLA.

ID	Description of the Air Quality Focus Area
1	London Bridge at Borough High Street
2	Elephant and Castle to St George's Circus
3	Walworth Road / Camberwell Road / Camberwell Green
4	Tower Bridge Road A100
5	A2 Old Kent Road from East Street to Trafalgar Avenue
6	Lower Road A200 Surrey Quays
7	Peckham High Street and Clayton Road

Table 4 Air Quality Focus Areas in the London Borough of Southwark

⁵ GLA (2013) Air Quality focus areas data accessed at <http://data.london.gov.uk/dataset/air-quality-focus-areas>

Figure 7 is a map showing the GLA's Air Quality Focus Areas in Southwark with the Air Quality Focus Areas adjacent to the boundary of the Authority included. Table 4 and Table 5 give descriptions of the air quality focus areas in the borough and the air quality focus areas adjacent to borough's Boundary.

ID	Local Authority	Description of the Air Quality Focus Area
8	Lewisham	New Cross Gate and New Cross
9	Lewisham	Honor Oak Park junction Brockley Road
10	Lewisham	Forest Hill and Perry Vale Junction
11	Lambeth	Herne Hill / Croxted Road / Half Moon Lane / Dulwich Rd / Norwood Rd
12	Lambeth	Kennington Oval and Camberwell New Road
13	Lambeth	Waterloo Road
14	City of London	Farringdon Road and New Bridge Street at Blackfriars
15	City of Westminster	Embankment Charing Cross to Tower Hill
16	Tower Hamlets	Tower Hill / Tower Gateway / Cable St / The Highway

Table 5 Air Quality Focus Areas in the adjacent boroughs

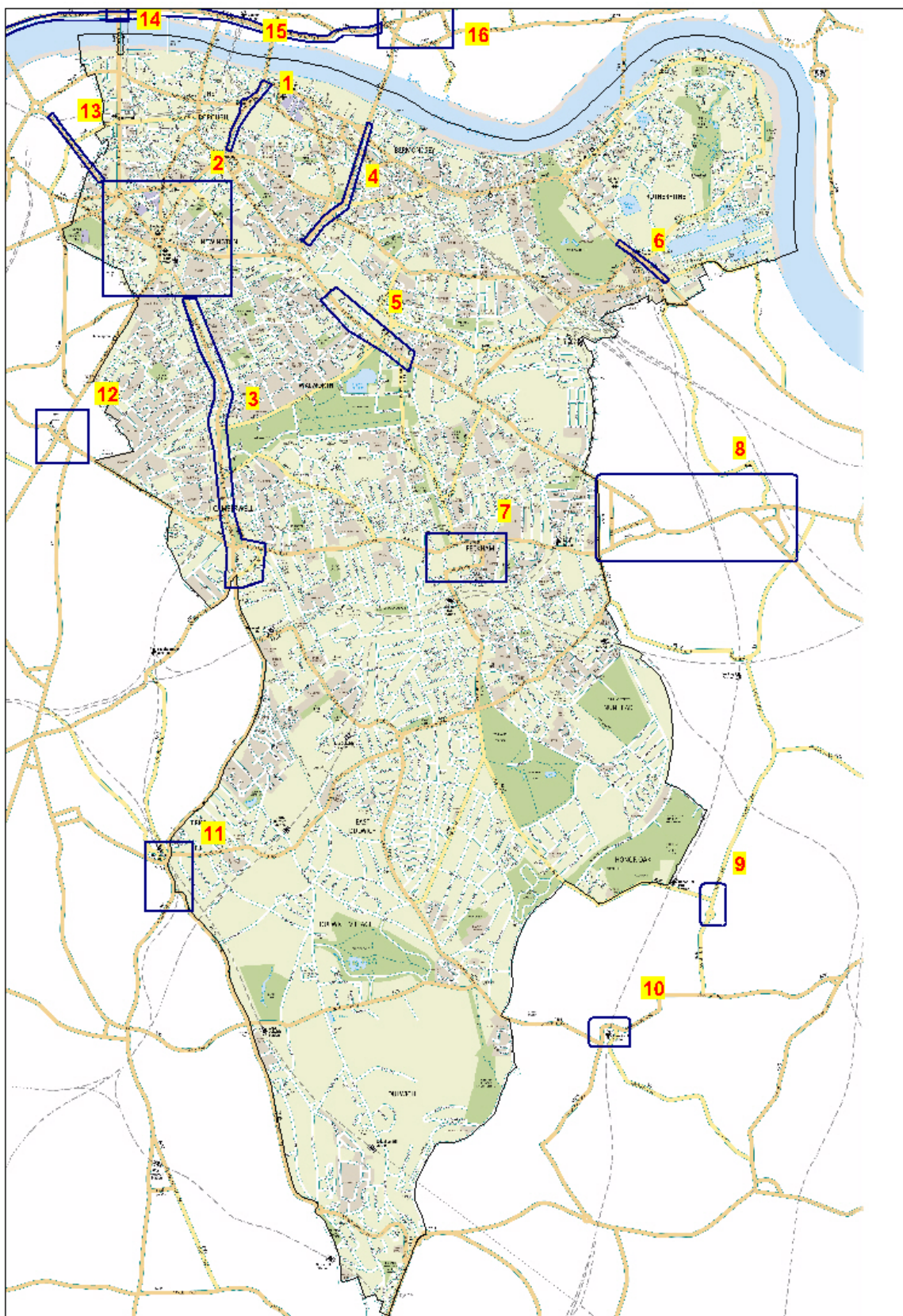


Figure 7 London's Mayor Air Quality Focus Areas Map within and adjacent to the L.B. Southwark boundary

Appendix 4 – Emission Sources

Introduction

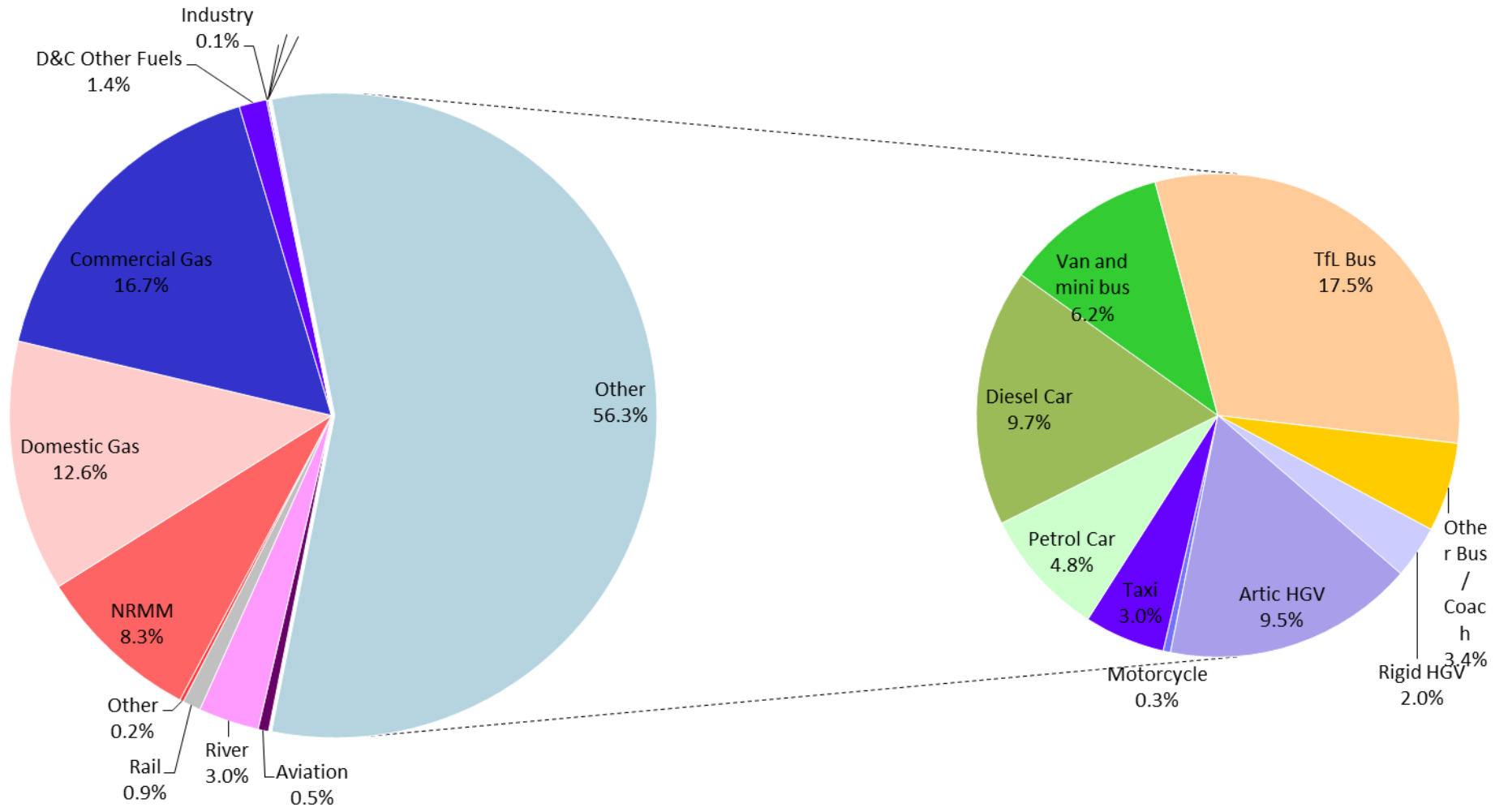
The GLA has produced the London Atmosphere Emissions Inventory (LAEI) for over a decade, the latest version was published in March 2016. The LAEI 2013 provides estimates in the Greater London area emissions for NO₂, PM₁₀, PM_{2.5} & CO₂ for the base year 2013 and forward projections/predictions of pollutant levels for 2020, 2025 and 2030.

The LAEI can be downloaded from the [GLA Datastore](#). The LAEI 2013 provides the following data.

- Supporting Information
- Grid Emissions Summary (in Excel, Mapinfo and Arc GISformat)
- Detailed Road Transport (in Excel, Mapinfo and Arc GISformat)
- Modelled Concentrations for the three pollutants for all the years
- Presentations Slides of the GLA LAEI 2013 Workshop on 14/04/2016

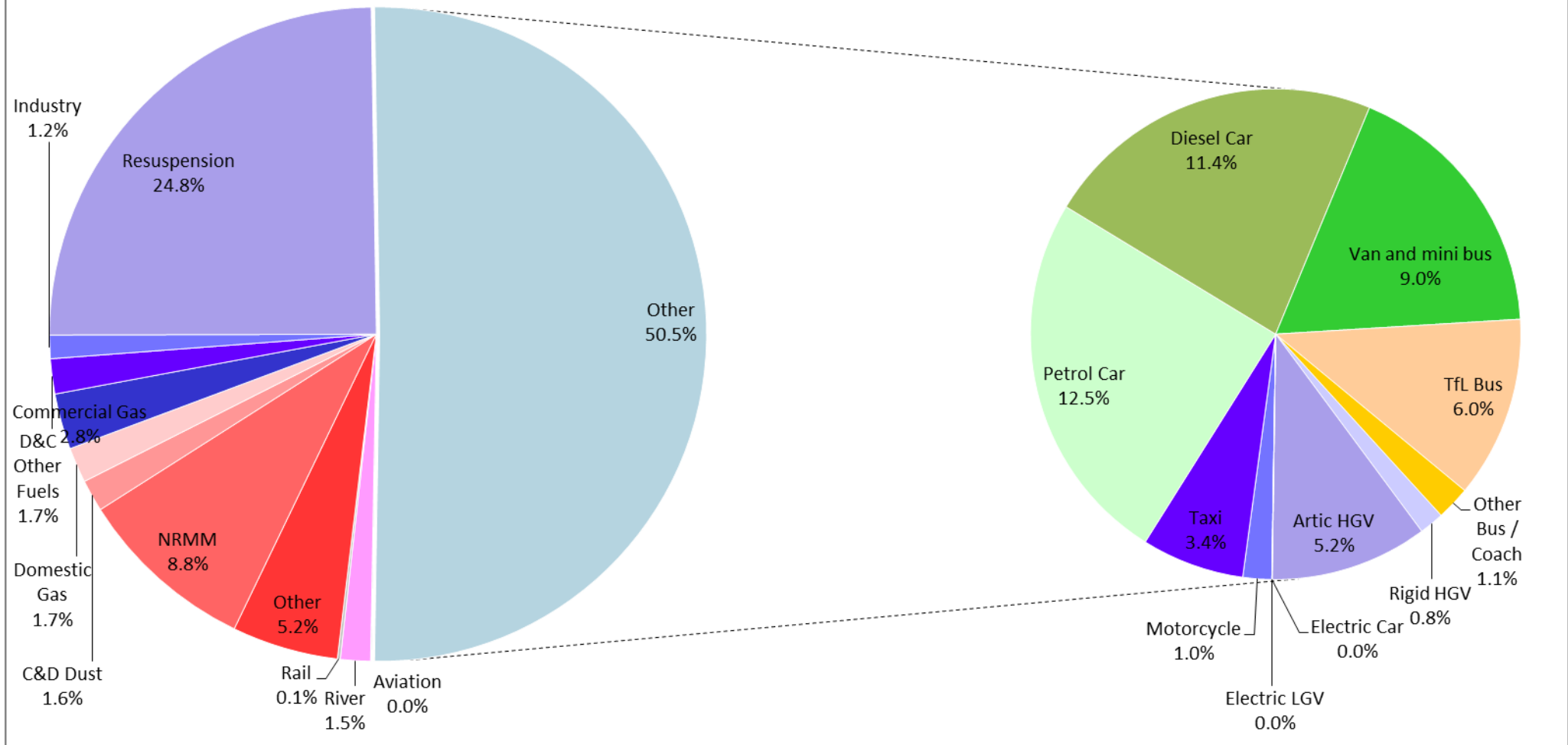
With the LAEI 2013 data the GLA has provided [bespoke Borough by Borough information](#) which utilises the information contained in the LAEI 2013. The information provides the concentration maps for 2013 and 2020 for NO₂, PM₁₀ & PM_{2.5} for all the London Boroughs and Excel Tools. The [Excel Tools](#) included a Source Apportionment Tool. The following pie charts show the source apportionment for NO_x, PM₁₀ & PM_{2.5} emissions in 2013 for the London Borough of Southwark. Within the source appointment tool, the emissions can be calculated for each 1km grid square within the borough.

Southwark - Source Apportionment of NO_x Emissions (%) - 2013 Emissions



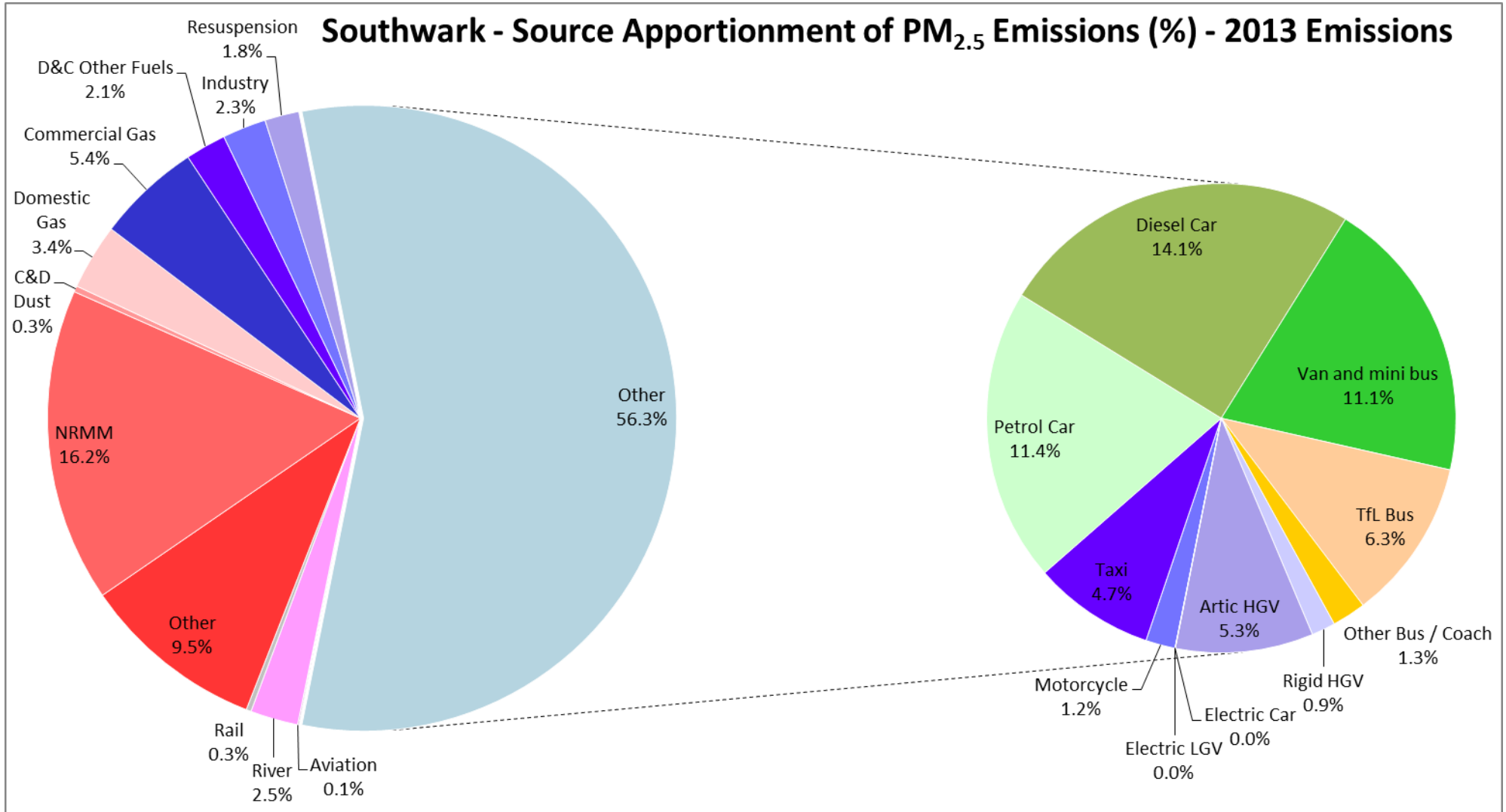
57

Southwark - Source Apportionment of PM₁₀ Emissions (%) - 2013 Emissions



58

Southwark - Source Apportionment of PM_{2.5} Emissions (%) - 2013 Emissions



59

Appendix 5 - Glossary

AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQO	Air Quality Objective
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
CAZ	Central Activity Zone
GLA	Greater London Authority
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LLAQM	London Local Air Quality Management
NRMM	Non-Road Mobile Machinery
PM ₁₀	Particulate matter less than 10 micron in diameter
PM _{2.5}	Particulate matter less than 2.5 micron in diameter
TEB	Transport Emissions Benchmark
TfL	Transport for London

Consultation responses to the Southwark Council Air Quality Strategy and Action Plan (Draft December 2016)

GLA response

	Comment	Response
1	The plan provides the minimum level of background information, this is not a problem as it focuses on the actions, but it would be beneficial to include some of the mapping and source apportionment charts from the LAEI 2013	The background information and mapping and source apportionment are included in the separate Technical Appendices
2	A particular area for commendation is the inclusion of firm targets for most of your actions.	Noted
3	Measure 2.1 - What is the technical guidance? – will it be a Supplementary Planning Document or a non-statutory document? We'd suggest the former if possible and stephen.inch@london.gov.uk is available to offer advice	This document will be technical guidance for the time being due not being able to resource writing a new SPD in Planning Policy work programme at present as the Southwark Plan is being revised. Will consider timetabling a new SPD when the Southwark Plan review is complete.
4	Measure 2.3 - A campaign focused in this way on fuel type and fuel economy sounds like a really good targeted approach	Noted
5	Measure 3.1 – It would be useful to specify that you mean TfL STARS accreditation.	TfL STARS inserted into the measure
6	Measures 3.1-3.3 – Could you include specific quantified targets here?	Will discuss with the relevant services/teams to produce quantified targets
7	The level of Public Health involvement/leadership in projects is supported.	Noted
8	Measure 4.6 – This is very positive active but requires a timeline for completion.	Timeline to be included in Action Plan
9	Measure 4.11 – We really need your support with regards to charging infrastructure for taxis, to support the Mayor's requirement that all newly licenced taxis must be zero emission capable from 2018.	New measure will be added to the Action Plan
10	Section 5 – Whilst it is supported to have an integrated approach to carbon and air pollutant reduction it needs to be made clearer in the title and the introduction that this is an integrated strategy, otherwise the carbon section doesn't really work/fit.	New sub-header inserted in the title row to explain these air quality actions are extracted from the Authority's Carbon Reduction Plan
11	Section 6 - is very comprehensive	Noted
12	Section 7 – it is very positive that you have included this section. Action/s 7.1 are key – we support all of these aims but they need timelines – for example, when will the monitoring begin and what is the deadline for instigating projects in each of the focus areas?	Timeline/s to be included in the Action Plan table

Environment Agency response

13	We support the general theme throughout the Air Quality Action Plan (AQAP) of identifying air quality as a strategic factor within local planning policy and through Southwark's Joint Strategic Needs Assessment (JSNA) for public health.	Noted
14	We note the actions in the plan are not time bound and we suggest that delivery of the plan are reviewed against SMARRT criteria (i.e. Specific, Measurable, Assignable, Realistic, Resourced, Time Bound) in order to support its actions.	Action plan reviewed with timescales and revised targets included.
15	<p>We consider the Plan could place more emphasis on spatial planning as a way of implementing the AQAP actions through development.</p> <p>The AQAP is part of a local authority's evidence base required to support its local plan and assess the effectiveness of its development management policies. Policy DM60 of the New Southwark Plan Strategy reflects the need to consider the impact of poor air quality, to minimise air pollutants and reduce residential exposure.</p> <p>This is in line with the London Plan's Policy 7.14 Improving air quality which states that, boroughs should have policies that:</p> <ul style="list-style-type: none"> a. seek reductions in levels of pollutants referred to in the Government's National Air Quality Strategy having regard to the Mayor's Air Quality Strategy b. take account of the findings of their Air Quality Review and Assessments and Action Plans, in particular where Air Quality Management Areas have been designated.' 	Noted
16	<p>Policy 7.14 also requires boroughs to ensure that development proposals 'minimise increased exposure to existing poor air quality and make provision to address local problems of air quality (particularly within Air Quality Management Areas (AQMAS)'. Please also refer to Planning for Air Quality Document http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf</p>	Noted
17	We would suggest that for larger development areas or opportunity areas, an air quality assessment is carried out for the whole area to establish baseline air quality and to assess the impact of the development plan for the area on future air quality, rather than relying on individual developer's assessments as this will miss cumulative impacts.	This approach will be included in the Authority's Technical Guidance on Air Quality
18	<p>We recommend the AQAP includes an action to identify and manage the impact of growth and regeneration on waste management and industrial process regulated under the Environmental Permitting Regulations, by</p> <ol style="list-style-type: none"> 1. Ensuring any waste management facilities relocated due to redevelopment master plans, is suitably planned and funded to allow operators to invest in appropriate dust management control infrastructure to minimise the creation and migration of dust from the activities. In certain circumstances, where particular waste management activities occur in close proximity to receptors this may include the provision of a 	This will be included in the Authority's Technical Guidance on Air Quality

	<p>building.</p> <p>2. Ensuring that where redevelopment results in bringing receptors closer to existing regulated processes, full consideration is given to whether and how, infrastructure to minimise the impact of those industries need to be improved as receptors have been brought closer to them.</p> <p>Where new residential development is proposed in close proximity to existing regulated processes we recommend the planning process is used to require mitigation measures. These could include quadruple glazing, and storage rooms only facing waste sites, not living rooms / bedrooms.</p>	
19	We support the ongoing commitment under Section 1 to maintain Air Quality Monitoring capability through continuous and periodic monitoring equipment.	Noted
20	<p>We support the recognition of the measures identified under Section 6 (Regulation) of the draft plan and would welcome the opportunity to discuss any potential cross-over with the plans ambitions on the sites we regulate.</p> <p>1. The Environment Agency regulates waste management process in the Borough, some of which have the potential to generate dust. It is our intention to review dust management practices at these operations with a view to ensuring appropriate techniques are being used to minimise the creation of dust and its migration off-site. You are welcome to assign this as an action to us in your plan if you consider it appropriate.</p> <p>2. We would suggest that for larger development areas or opportunity areas that an air quality assessment is carried out for the whole area to establish baseline air quality and to assess the impact of the development plan for the area on future air quality, rather than relying on individual developer's assessments as this will miss cumulative impacts.</p>	<p>A new measure will be added to Section 6 – Regulation</p> <p>Noted</p>
21	<p>We note the source apportionments in Appendix 4 of the Technical Appendices (page 22) identify re-suspension as a significant proportion of PM₁₀ emissions in the Borough, but that there are no specific targets relating to road sweeping. From our experience of regulating a cluster of waste operations in the Borough, we are aware access for road sweepers can be hindered by parked and / or abandoned vehicles.</p> <p>We would recommend the council considers actions are assigned for both targeted road sweeping, and initiatives that will enable sweeping to be effective.</p>	An appropriate new measure will be discussed with appropriate services/teams and potentially added to the plan

Better Bankside response

22	<p>Air Quality Strategy</p> <p>We feel it lacks detail on:</p> <ul style="list-style-type: none"> • Overall objectives of the strategy & plan and how these relate to the borough's Strategic Plan • Key partners beyond the GLA in the delivery of the strategy & action plan including Business Improvement Districts (Better Bankside, Team London Bridge, Blue Bermondsey) • The expected duration of the plan, how it will be updated when required and how the overall impacts will be measured • Who is responsible for overseeing its delivery • How other borough Plans (e.g. Cycling Strategy) can deliver the objectives of the Air Quality Plan. 	<p>This document will be part of the Authority's Sustainability Plan which will link all the plans together.</p> <p>Will include BIDs by expanding the bullet points in paragraph 2 of the Air Quality Strategy</p> <p>The Air Quality Action Plan is a fluid document and will be reviewed every year when the Annual Progress Report is compiled. Out of date measures are deleted and new measures added to keep the document current</p> <p>Cabinet Member for Public Health, Parks and Leisure will be overseeing delivery</p> <p>The Strategy aims to ensure that local air quality policy is co-ordinated with other relevant local policy documents including the Cycling Strategy.</p>
23	<p>Section 1 – Management of Air Quality: Monitoring Air Quality</p> <p>There only two continuous monitoring stations in Southwark at the moment. Modelling data from Kings College London and the GLA Focus Area designation indicates that parts of our Bankside consistently experience poor air quality. However, without any kind of monitoring we are unable to accurately measure air pollution or assess the impact of any measures.</p> <p>We note the general commitment in Action 7.1 to ensure that local air quality in the GLA Air Quality Focus Areas is monitored and that one of these areas is 'London Bridge at Borough High Street'.</p> <p>We would therefore strongly endorse including in the plan the commitment to install some kind of roadside monitors that can measure both NO₂ and PM₁₀ in the following locations:</p> <ul style="list-style-type: none"> • Borough High Street (northern section between Southwark Street and London Bridge • Southwark Bridge Road junction with Southwark Street • Blackfriars Road junction with Southwark Street/ Stamford Street. 	<p>The Authority has planned to increase the air quality monitoring in the Borough, with an increase of Nitrogen Dioxide Diffusion tubes in the Air Quality Focus Areas. Locations suggested in the comments will be included.</p> <p>In July 2017 there is an opportunity to move the air quality monitoring station situated on Tower Bridge Road, the new location is yet to be finalised.</p> <p>At present the station is monitoring Nitrogen Dioxide, we will be exploring whether we can include PM₁₀ or PM_{2.5} monitors on re-location.</p>

24	<p>Section 2 – Reduce Emissions</p> <p>Action 2-3: We welcome the commitment to an annual campaign to raise awareness of the role of fuel type and fuel economy can play in reducing emissions. We would be keen to work with the Council to see how this messaging could be tailored to relevant business decision makers including:</p> <ul style="list-style-type: none"> • Fleet operators • Business procurement leads • Office managers. <p>This campaign would be most effective if combined with communications more generally on behaviour change that can have an impact on improving air quality (Action 3-8).</p>	<p>The authority would welcome working with the BID's to set up work programme/s to provide a wider campaign in the Borough. New action to be included.</p>
25	<p>Section 3 – Public Health, Education and Awareness</p> <p>Actions 3-3: Better Bankside has a long track record in promoting commuting trip by cycle or on foot. We will continue to do this, guided by targets set every 5 years following a comprehensive Employee Travel Survey. We are focusing on trips made during the working day and suggest that this should also be focus for this Air Quality Plan.</p> <p>We would welcome further collaboration with the Council on measures such as those consistent with the 2015 Southwark Cycling Strategy. These include:</p> <ul style="list-style-type: none"> • Greater promotion and provision of cycle confidence training, including to those working in the borough • Work to improve cycle parking provision, both short term and for commuting • Provision and promotion of quality cycle routes along roads with lower air pollution. <p>We understand that an updated Walking Strategy is still preparation. This should also focus on measures that promote walking trips along low emission routes, such as The Low Line.</p>	<p>Noted – comment will be passed to Transport Policy Section.</p>
26	<p>Actions 4-3 to 4-5: We fully endorse efforts to consider how best freight consolidation could be applied for Southwark, partnership with neighbouring boroughs. We suggest that it would be helpful to include a reference to the borough's Business Improvement Districts as potential partners in ensuring that a solution is used by the maximum number of employers.</p> <p>As well as FORS accreditation, we would welcome the inclusion of the commitment to ensuring that suppliers are using the lowest emission vehicles possible regardless of whether they are using the freight consolidation facility.</p>	<p>The measures will be amended to include the BID's and it will be included in the contract requirements that suppliers will be required to lowest emission vehicles</p>

27	<p>Section 4 – Cleaner Transport Reducing Emissions from Delivery and Servicing</p> <p>We welcome the inclusion of Action 4-5 with the specific reference to our area, but again suggest that this could be strengthened by a specific reference to joint working with Better Bankside and our neighbours Team London Bridge.</p>	Measure has been amended to include BIDs
28	<p>Reducing emissions from vehicles and Taxies & Private Hire Vehicles</p> <p>Action 4-11: - We fully support lobbying TfL to ensure that PCO licensing includes a Smarter Driving training elements. We would like to see this go further and would welcome the Council's support in calling for all taxis and PHV's within the Central Activities Zone to be zero or very low emission vehicles.</p>	The Council supports the Mayor of London measure to require all new PHV and Taxis to be zero emission capable.
29	<p>Actions 4-12 to 4-13: - We fully support working with TfL to reduce emissions from buses and the proposed extension of the Ultra-Low Emission Zone to the South Circular</p>	Noted
30	<p>Action 4-18: - Our Bankside Wardens service is provided in partnership with Southwark Council's JET teams. We welcome action on anti-idling enforcement and look forward to working together to ensure that this is targeted in areas and at times of day where it is most needed.</p>	We welcome co-operation on this measure
31	<p>In addition to these actions, we would welcome the inclusion of a new Action that commits Southwark Council to partnering with Business Improvement Districts and other relevant stakeholders in commissioning research into what would be the most effective measures to reduce motorised traffic in the north of the borough.</p>	New measure will be considered with Transport Policy and potentially added to the plan.
32	<p>Section 5 – Reduction of carbon emissions Actions 5-1 to 5-6: We fully endorse the requirement for major developments to be both zero carbon and Air Quality Neutral. We would like to see more detail in due course of how this can be enforced.</p> <p>We suggest that the 'off-setting funds' be made fully transparent and able to be accessed to fund a range of projects that have a positive impact on local air quality. For our area, the Bankside Neighbourhood Forum could have a role in helping to decide where funds should be allocated. We would welcome the opportunity to explore how Better Bankside could add value through match funding.</p>	This will subject to Planning regulations regarding the 'off-setting of carbon funds'
33	<p>Section 6 – Regulation Emissions from construction equipment</p> <p>Actions 6.5 to 6.6:- We support the commitment to sure all strategic and major construction sites comply with GLA SPG criteria. We would welcome the</p>	We welcome the exopressed support and will work with the BIDs to develop best practice or pilot new

	<p>opportunity to see how major developments in our area and in particular members of the Bankside and London Bridge Logistic Group could develop best practice or pilot new equipment or methods that further reduce emissions.</p>	<p>equipment or methods that further reduce emissions.</p>
34	<p>Section 7 – Support the GLA Air Quality Aims GLA Air Quality Focus Areas</p> <p>Action 7-1: - We note the provisions made here to develop specific projects in the GLA Air Quality Areas. In the absence of any further detail at this stage, we would strongly urge that discussion on those projects start as soon as possible for the London Bridge / Borough High Street area, in collaboration with us here at Better Bankside and our colleagues at Team London Bridge.</p>	<p>We will discuss any proposals with all relevant organisations when the specific projects are being considered for the GLA Air Quality Areas.</p>
35	<p>Section 8 – Air Quality Projects in the Borough</p> <p>Action 8-5: - Better Bankside is already collaborating with Southwark Council in the delivery of projects related to air quality, notably the Clean Air Mini-Neighbourhood funded via the Mayor’s Air Quality Fund. We bring both capacity and match funding and would be happy to explore further opportunities to jointly fund air quality projects that meet our members’ objectives.</p>	<p>The Authority will continue to explore further opportunities to jointly fund air quality projects with the BID areas.</p>
36	<p>Further Actions we suggest should be included in the Action Plan</p> <p>We very much regret that references to increased urban greening and green and healthy streets are not picked up in the action plan. We very much believe that to support the aims of the action plan that the importance of the quality of our streets and public spaces, in terms of pedestrian and cycle comfort, and green infrastructure needs to be considered.</p> <p>We suggest that these further actions should be included include in a section called ‘Clean and Healthier Streets:</p> <ul style="list-style-type: none"> • Investments in public realm enhancement and maintenance should be assessed against criteria as set out in Transport for London’s Healthy Streets approach. • Targets should be set for increasing the quantity and quality of on-street urban greening to help reduce exposure to air pollution. This could include street tree planting, on-street rain gardens, green walls or other on street planting. 	<p>These are very useful suggestions.</p> <p>The ‘Healthy Street Approach’ has been adopted with the Authority’s Draft Kerbside Strategy and a new measure will be included</p> <p>A new measure increase the amount of green infrastructure in the borough will be included.</p>

Team London Bridge Response

37	<p>TLB has a strong remit from businesses since 2015 to deliver the London Bridge Plan. Our mission is to ensure London Bridge excels as a leading place for global commerce and continues to develop as a pioneering local centre for enterprise, culture and entertainment.</p> <p>As a place, there are clearly issues around poor air quality – whether along the Tower Bridge Road or Borough High Street, or as shown through image in the media of the Shard surrounded in polluted fog. Poor air is a real issue and affects our reputation as an attractive place to do business. We shall be promoting measures to improve air quality alongside the borough, so will be an active and supportive stakeholder</p>	Noted
38	<p>Health impact. The strategy indicates poor air quality affects health outcomes of 9,500 people. This should read that this number have died</p>	<p>Death due to poor air quality is not recorded on death certificates and the methodology to calculate these figures are based on life-years lost, which are then translated to the equivalent deaths at typical ages</p>
39	<p>Partnership. In general, the strategy and action plan cover a broad number of agendas, and shows strong joint action across council departments, including health. We think this is very positive. However, we would like to see explicit indication of working in partnership with other borough and non-borough stakeholders to achieve better air. This should include BIDs</p>	<p>BIDs will be specifically referenced in the Air Quality Strategy & action plan</p>
40	<p>Targets. There are no targets indicated in the strategy. It is important to have this so that as partners we can strive to deliver outcomes – for example a reduction in the number of focus areas</p>	<p>The Strategy gives the overall of aims and objectives of air quality in the Borough The targets are included in the second part of the document, the action plan</p>
41	<p>Monitoring. There is insufficient monitoring in Southwark of main roads, and particularly Transport for London roads, and it is unclear if there is sharing of data between partners with data. TLB is working with University College London on the Fresh Air Square to monitor air quality through a AQ Mesh monitor – which can monitor every 15 minutes. The Diffusion tubes used by the Council are accurate at the point the data is collected, but this may not pick up the peaks of poor air.</p>	<p>The Authority has planned to increase the air quality monitoring in the Borough, with an increase of Nitrogen Dioxide Diffusion tubes in Air Quality Focus Areas. The locations mentioned in the comments will be included.</p> <p>In July 2017 we are planning to move the air quality monitoring station situated on Tower Bridge Road to a new location At present the station is monitoring Nitrogen Dioxide, we will explore if it is possible to monitor PM at the new location.</p> <p>Data for air quality monitoring is available on the London Air Quality Network website and on the</p>

		<p>Southwark website in the revised Air Quality section.</p> <p>The authority is assisting the MAGIC project – “Managing Air for Green Inner Cities”. This project comprises of three components:</p> <ul style="list-style-type: none"> (i) a fully resolved air quality model that interacts with sensor data and provides detailed calculations of the air flow, pollutant and temperature distributions in complex city geometries and is fully coupled to naturally ventilated buildings, and green and blue spaces; (ii) reduced order models that allow rapid calculations for real time analysis and emergency response; and (iii) a cost-benefit model to assess the economic, social and environmental viability of options and decision.
42	<p>Green infrastructure and clean routes.</p> <p>We would like to see greater emphasis on the role greening can play, whether along clean routes or on buildings – either retrofitted or as part of the design. Wording from the Mayor’s ‘A City for all Londoners’ document mentions that new buildings should be “air quality positive”, with greening a key element, and the GLA is also promoting Healthy Streets, which can be an aspiration (with funding attached) in the borough.</p>	<p>The ‘Healthy Street Approach’ has been adopted with the Authority’s Draft Kerbside Strategy and a new measure will be included</p> <p>A new measure will be inserted within the latest version of the Air Quality Strategy and Action Plan to increase the use of green infrastructure in the Authority.</p>
43	<p>Supportive transport infrastructure (4). There is a focus on information, but very little information about funding of infrastructure to support cleaner transport – for example cycle parking, cycle routes, clean routes for walking and cycling (particularly related to purposes of education, commuting or visiting), EV charging points or supporting Santander cycle hire points – all relevant in the London Bridge area, and to which we can potentially provide matched funding.</p>	<p>The funding for the Air Quality Action Plan is from existing Authority resources or from successful grant bids.</p>
44	<p>Road pricing Action 4-13. Now 4.14</p> <p>It is positive that Southwark can have a voice to push for ULEZ. We suggest that Southwark also play a stronger role demanding the GLA look at road charging up to the South Circular as stronger policies are clearly needed to limit traffic and congestion.</p>	<p>Southwark support for an increase to the congestion charge zone will be considered as part of the GLA consultation process for both the CCZ and ULEZ.</p>
45	<p>Freight (4).</p> <p>Activities around reducing emissions from delivery and servicing are very important and these are</p>	<p>Measure 4.5 will be amended to include the BIDs and to promote the</p>

	<p>detailed. The Action Plan mentions a number of activities through freight, which is very positive – and we hope to be able to work with Southwark to deliver this work. There is no mention of exploring more delivery and servicing via river or rail – with potential for both in the London Bridge area.</p>	<p>rationalisation of deliveries and servicing in the London Bridge area, where rail and river based options could be explored.</p>
46	<p>Developers (5). Does the zero carbon objective based on the London Plan go as far as the current Mayor's plans for the new London Plan – if not then this should be updated alongside any new policy – as mentioned in 7-4.</p>	<p>The reference to London Plan is not time specified therefore the objective will be in accordance with current London Plan at the time of planning application.</p>
47	<p>New Southwark Local Plan (5). We are supportive of the use of robust planning polices in the New Southwark Plan being used to deliver air quality benefits, and a strong and constantly evolving design and construction SPD to support this, encouraging innovative and effective measures. However, having contributed to a first draft of the new Local Plan Area Visions and site allocations (not the Development Framework), there is very little emphasis on greening or air quality positive development</p>	<p>A new action will be incorporated into the action plan to increase green infrastructure in the Borough. This comment will be shared with Planning Policy.</p>

Southwark Green Party response

48	The strategy acknowledges the severe impact of air pollution on the health of Southwark residents, noting in the introduction that 'poor air quality disproportionately affects the young, old, ill and poor' (page 5). But this recognition of the serious public health challenge is not matched by actions.	Noted
49	The plan is not strong or bold enough, and it does not provide enough detail of those actions the council does propose to take. We are dismayed that so many items lack clear targets, timescales, objectives and means of measuring success. This is particularly noticeable in comparison with Southwark's previous plan which included timescales and indicators for each planned measure (Air Quality Improvement Strategy 2012-2017 and Action Plan 2012-2017 (AQIS 2012)).	The Air Quality Strategy and Action Plan has been reviewed to include clear targets and timescales and means of measuring success
50	The introduction states that 'Southwark is committed to integrating our Air Quality and Climate Change policies'. We welcome this fundamental insight that the two areas are interlinked. Given the council's responsibility for public health, we feel that it is important that all council staff are aware of how actions their departments take will affect residents' health. We note the ambition to 'maintain a cohesive suite of policies by co-ordinating local air quality policy' with other areas such as the Kerbside Strategy and Tree Planting, Parks and Green Spaces, but would like some detail of how this will happen. We would like to see more evidence of how council departments such as Housing, Regeneration, Education and Public Realm will be delivering infrastructure and services that support reductions in carbon consumption and polluting emissions. How will they be made aware of the air quality strategy? How frequently and in what way will they report back on their success in delivering reductions?	Other service areas will be made aware of the AQ strategy through the senior management team and will be required to report back annually as part of the London Local Air Quality management regime
51	We are concerned that this action plan does not refer to the success or failure of actions in previous air quality plans. For example, increasing registration for AirText alerts was an action point (Measure 17) in May 2012 (AQIS, 2012). In a deputation to the council in July 2012, Southwark Green Party called for information on airTEXT to be sent to all head teachers as a minimum step in increasing awareness of how parents and teachers can reduce children's individual exposure levels. We have been informed that only three Southwark schools have signed up for alerts by January 2017. Clearly, this makes us very doubtful about whether the council will deliver on its new promise (3-5) to promote airTEXT and Walkit.	The success of previous action plans are recorded in the annual progress reports, which can be found on the Southwark webpages in the Air Quality section. Further actions to improve the uptake air quality information with schools with are being perused,
52	Alerts are only a tool to reduce individual exposure, and it is more important to enable behaviour change to reduce overall pollution levels - for example, to reduce the number of car journeys to take children to school. The most publicised recent air pollution work with Southwark schools was the 'Clean Air 4 Schools' project run by LSx. But this was an 'awareness project'	The authority requires each school to have a travel plan which includes modal shift elements. The target for 2013 – 14 was met, the number of children being driven to school has decreased by 2%.

	rather than a 'modal shift project'. Data on behaviour change was only collected from two schools. This is completely inadequate. We call on the council to actively pursue modal shifts for journeys to school and to collect sufficient information to assess what works. AQ/S (2012) states: 'Incorporated within the Council Plan is a target to reduce the number of children being driven to school from a baseline of 15.7% in 2010-11 to 13% by 2013-14. In the past 5 years a 5% decrease in numbers has been achieved.' Was this target achieved? And what is the target for 2017-19?	
53	Finally, we believe that Southwark residents are very concerned about the impact of air pollution on their health and would welcome a stronger action plan. We want to see real actions to cut emissions of nitrogen dioxides and particulate matter in the borough.	The action plan has been reviewed, updated and when ratified will be considerably 'stronger ' than it's previous iteration.
54	In summary, we propose: <ul style="list-style-type: none"> • measurable actions and targets to help monitor progress, and on a scale equal to the seriousness of the public health challenge – with monitoring indicators to include data on behaviour change; • transparency concerning the delivery by council departments such as Housing, Regeneration, Education and Public Realm of infrastructure and services that help reduce carbon consumption and polluting emissions; • provision of clear feedback concerning these departments' success, or otherwise, in enabling reductions; • an assessment of the lessons learned from previous air quality plans, and of how this strategy avoids repeating past mistakes. 	Noted
55	1) We welcome these actions: 6-1 'Enforcement of the Clean Air Acts' by ensuring that all retail premises selling wood and coal are aware that the whole of the Borough is a Smoke Control Area. 6-2 'Discourage burning of logs and house coal in the Borough' through a communication campaign. 4-2 'Develop a freight consolidation solution for Southwark' and 'All Southwark Council suppliers to use the proposed freight consolidation solution where possible'. We are pleased to note that these items have dates and targets. 4-18 Train all Joint Enforcement Team (JET) officers in Road Traffic Act anti-idling enforcement. We note that idling is an increasing problem on side streets near major junctions such as Elephant and Castle, both by delivery drivers and Uber drivers, as well as outside schools. We welcome both education and enforcement	Noted
56	3-1 Encourage children to walk or cycle to school'	The number of schools with Gold

	<p>The plan talks only of increasing the number of Gold and Silver accredited schools. How many are there in the borough now? What would be a good level to aim for? How will an increase be achieved?</p>	<p>TfL's Star Accreditation at present is 11 schools The number of schools with Silver TfL's Star Accreditation is 11 schools New targets have been included</p> <p>The increase will be included within the officer work program.</p>
57	<p>We would like to see targets along the lines of the following:</p> <ul style="list-style-type: none"> • Every child will participate in cycle training at primary school • Sessions of individual transport planning will be offered at every primary school to help families shift away from using cars on the school run. Volunteer parent champions for clean transport will be trained to cascade advice to other families. • Enforcement of no-idling around schools. The previous plan, AQ/S 2012, included an indicator for this: 'The number of idling vehicles owner requests to turn off engines and percentage of FPN issued' (Measure 4). Why is there no such indicator in the current plan? • Provide access to cycles for staff This is not a new action so the target should involve increasing uptake. How many Southwark staff currently use pool bikes/their own bikes for council business? How can this be increased? How might the provision of non-standard cycles such as trikes and cargo bikes allow more staff to benefit? 	<p>All Southwark schools are offered Cycle training for Year 5 & 6, some schools do not accept the offer. The authority also offers Holiday Club Cycling Training.</p> <p>There are no resources available for this at present, but will be considered if resources are found.</p> <p>At present due to lack of resources, FPN's are not issued. There is now a new measure for Parking Enforcement Officers (PEO) to be authorised to serve FPN's in the Parking Enforcement contract as and when the current contract is amended.</p> <p>The target has been changed to increase the uptake of cycles for staff by 5% per year. There are 7 pool bikes for the use by Southwark staff There are 110 staff using their own bikes for council business.</p>
58	<p>Promotion of availability of airTEXT and Walkit apps'. 3-5 We are told that a 'plan for awareness raising programme to be devised by April 2018'. This is a ludicrous delay, given that the tools already exist and only need to be promoted, and that this item has been in the previous action plans. The council's communications department could instead be tasked with increasing awareness by (say) 50-80% by the end of April 2017. The makers of the app may be able and willing to share anonymised information about the locations of users registered in Southwark which will provide evidence for increased use. We would like to see a target minimum proportion of the population that is aware of episodes of high pollution, and minimum proportion of local population aware of chronic high pollution in their area, with an indication of how this will be</p>	<p>The target has been changed to September 2017. The implementation plan for this measure will explore methods to encourage other services and points of public contact such as local shops and amenities, sports centres, GP practices and community centres to register for the airTEXT alerts and promote public awareness.</p>

	<p>measured. The information about air pollution episodes and about how individuals can reduce their exposure by changing route or mode of travel should be diffused as widely as possible. The Plan could encourage other services and points of public contact such as local shops and amenities, sports centres, GP practices and community centres to register for the airTEXT alerts and promote public awareness.</p>	
59	<p>5-14 'Promote the use of renewable energy and minimise the energy demand of Southwark Housing'. We would be pleased to see the council 'explore the opportunity of installing renewable energy technologies and retrofitting insulation and energy efficiency measures'. We would like to see a target along the following lines: 'all estate regeneration schemes and proposals to carry out major works to the roofs of properties (both street properties and blocks of flats) must include an assessment of the cost and potential income from installing solar panels at the same time. Residents should be offered the opportunity to set up community energy schemes on estates.' Similarly, all plans for major repairs to lighting on estates should include an assessment of low energy alternatives and motion sensor systems. Where the energy savings will pay for themselves within 5 years, these should be made a priority for investment.</p>	<p>Further measures will be considered</p>
60	<p>3) We want to see additional actions a) Phase out diesel There is no mention of diesel in the document. This fuel has been identified as a carcinogen by the WHO and there have been calls for a London-wide ban on diesel. Please include in this plan details of how you will reduce pollution from Southwark Council's activities by changing the fleet to diesel-free and electric vehicles; training drivers (both of fleet vehicles and contractors) to turn off engines when stopped; and enforcing anti-idling legislation for members of the public and delivery vehicles. We would like to see Southwark Council commit to ending all new purchases of diesel vehicles for its fleet within the life of this plan.</p>	<p>The fleet is being replaced with alternative fuelled or petrol based vehicles. Presently there are some specialised vehicles are not available with non-diesel engines. There is an instruction to Council drivers to switch off the engine when parked.</p>
61	<p>b) Reduce idling 4-18. Train all JET officers in Road traffic Act anti-idling enforcement. Please give a target date for the training. We would like to see targets and timetables such as: reduce idling outside schools to 0% through a combination of education and enforcement by June 2017.</p>	<p>Due to the resources required the authority will not be able to reduce idling outside schools by June 2017. The Authority is working towards authorising staff to enforce idling legislation and is considering appropriate locations for School Streets interventions in appropriate locations.</p>

62	<p>c) Insulate council blocks</p> <p>Please include in this plan details of how you will insulate council properties to reduce fuel consumption and consequent emissions from domestic heating.</p>	<p>There is a 'Decent Homes' programme within the Housing and Modernisation Department to deal with the council residential properties, which includes increasing insulation.</p>
63	<p>d) Give details of concrete actions to promote walking and cycling These could include:</p> <ul style="list-style-type: none"> • reinstating the cancelled cycle loan scheme in order to help people start cycling • creating protected cycle lanes the length of the Old Kent Road • supporting private landlords in providing cycle parking for shared houses and blocks of flats by setting up a bulk buy scheme for approved designs of cycle lockers • replacing the Christmas season waiver of 'pay and display' car parking fees with a temporary cargo bike delivery scheme to encourage people to shop on foot in local high streets <ul style="list-style-type: none"> • making sure that new Quietway routes are suitable for age 8-80 and are safe to access 24 hours a day. This could mean, for example, removing some car parking spaces on Wells Way to create a link in cycle route Quietway 7 that doesn't involve cycling through Burgess Park. • Ambitions to increase the numbers of people cycling in the borough must be linked to air quality policy and therefore given a high priority. 	<p>When resources are available.</p> <p>This is proposed in the Old Kent Action Plan No resources at present to support this action</p> <p>The support for 'Small business Saturday' and the waiving of on-street parking fees in the North of the Borough and in Peckham, through December, costs the council little in revenue and effects only about 55 parking bays. All studies carried out in Southwark on our high streets in Peckham and East Street show low levels of car use to shop in Southwark already.</p> <p>This outside the scope of this action plan. Comment will be forwarded to Transpot Planning for consideration as part of the Cycling Strategy</p> <p>The Authority recently ran a campaign to increase people cycling in the Borough and this was linked to air quality. The link is acknowledged and in place.</p>
64	<p>e) Give details of transport alternatives that could be promoted to residents</p> <ul style="list-style-type: none"> • promote local car clubs. There is no mention of car clubs in the current plan, whereas AQ/S 2012 stated: 'Southwark will continue to encourage the use of the car club schemes, monitor and report on uptake and allocate additional spaces should demand warrant'. Why is this not in the current plan? • where membership of a car club is provided to purchasers of flats in car-free developments, this should be publicised and promoted to surrounding residents to increase uptake and supply of shared vehicles in the area. • publicise car-sharing schemes for longer journeys that use social networks (e.g. Blablacar) 	<p>A new measure will be added to the current plan</p> <p>Noted</p> <p>We promote car – sharing schemes on the Southwark air quality web-pages.</p>

	<ul style="list-style-type: none">• offer opportunities to try cargo bikes, child seats, tag-along bikes, trikes and non-standard bikes that may be suitable for older people or those with disabilities.• publicise car-shares, cycle loans and supermarket delivery schemes as part of a package that will enable residents to give up a private car and make financial savings and health improvements.	<p>This could be included within future air quality promotional campaigns</p> <p>This will included within future air quality promotional campaigns</p>
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Comments from responders using on-line form - responses

65	Web Ref No: 22712 AQSAP-clear-and-easily-understood: Useful-non-tech-summary?: Understand-AQSAP-objectives:	Yes Yes Yes	Noted
66	Agree-with-AQSAP-objectives	I think they are far too conservative and avoid tackling the key causes i.e. transport and the volume of the wrong sort of traffic	Noted
67	Are-measures-suitable-for-Southwark:	Yes they are relevant but relatively ineffectual	Noted
68	Do-measures-go-far-enough-or-need-more-development:	Much further. I would like to see much more road space reallocation to reduce the volume of traffic. Which, by the way, is no longer considered economically significant. Maybe public transport, but this should all be CO ₂ neutral anyway	Noted
69	Other-measures-to-be-included?	Banning of diesel vehicles. Total ban of all vehicles on certain days, maybe Sundays, to allow cycling to take more hold and for pedestrians to experience what not having pollution is like. To say you cannot act because you are just one borough in 32 is just not good enough. Southwark is an inner London borough and should therefore take more of a strategic role	Noted, possibly will be able to undertake actions in some neighbourhoods but closure of bus routes and main routes unlikely to be possible
70	Initiatives_to_reduce_pollution_near_schools	Vehicle bans at peak arrival and drop off times. They have done this in Scotland I believe. A ban of parents dropping off children at school by car. Imposition of penalties for persistent offenders.	New measures will be added. The authority will be participating in the GLA Air quality Audit at primary schools and is currently shortlisting schools for a School Streets pilot.
71	Agree_with_enforcing_law_to_stop_idling_engines?:	Yes	Noted
72	Any_vehicles_that_should_be_concentrated_on	Diesel of course	Noted
73	Any_areas_to_be_tackled_first?	All areas. Blanket action. There may be hotspots but everyone knows how serious this issue is. You cannot expect people to be less car dependent if you cannot improve the environment for walking and cycling.	Noted, However GLA require Southwark to work in the designated Air Quality Focus areas as a priority.
74	Agree_that_developers_should_actively_improve_air_quality	Of course	Noted

75	Info_for_website:	<ul style="list-style-type: none"> • Air pollution levels • Advice on how you can reduce your own impact on air quality • Information on the health effects of poor air quality • Information on initiatives that Southwark is taking 	All this information is currently on our AQ webpages
76	Priority_locations_f or_monitoring_air_quality?:	Outside schools for education purposes. Monitoring is pointless generally if you don't act on the results	Current monitoring data is used to as part of process for checking the efficacy of AQ modelling and policy formulation.
77	Worthwhile-change-from-AQSAP	Not really. It is the elephant in the room. I am very concerned about it, for everyone. I cycle in London and teach people to cycle and think the quality of the air we breathe is on the whole pretty awful	Noted
78	Comments:	I think an analysis of journey purpose by vehicle would be an enormous education. We do not discriminate against non-essential vehicle travel and we should. I think people expect it now with the horrifying air quality figures for London	Noted

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