

# London Borough Of Haringey



## **Air Quality Updating and Screening Assessment for 2014**

**In fulfilment of Part IV of the Environment  
Act 1995**

## **Local Air Quality Management**

**May 2015**

## London Borough of Haringey

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## Executive Summary

This Updating and Screening Assessment is a requirement under the Environment Act 1995, Part IV, for local authorities to periodically review and assess current and future air quality. This report also serves to:

- Retain the profile of LAQM within the local authority
- Provide a means of communicating air quality information to members and the public
- Maximise the usefulness and interpretation of the monitoring carried out by the local authority
- Make the next stage of review and assessment easier, as the report provides a readily available up-to-date source of information
- Help local authorities respond to enquires for information on air quality
- Provide information to help other policy areas, such as transport and land use planning
- Provide a source of information for developers carrying out air quality assessments of new schemes

Nitrogen Dioxide and Particulate Matter (PM10 and PM2.5) continue to be monitored using automatic and non-automatic methods.

Monitoring results indicate a slight decrease in nitrogen dioxide levels compared with 2013 levels. Despite this the annual average remains exceeded at the Archway road location and at the High Road location in Tottenham. All automatic sites continue to be affiliated to the AURN; all reported data from these sites is validated and ratified to AURN standards.

PM10 monitoring was stopped at the High Road, Tottenham location. The instrumentation was removed by Defra to another location outside of the borough. PM10 results remained below the annual objective. PM2.5 monitoring is continues at the High road location.

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Monitoring of previously identified NO<sub>2</sub> hotspot locations continues with the completion of 2 monitoring sites and the start of 2 new locations; primary schools within 150m of busy roads >10, 000 vpd. All hotspot locations are representative of relevant exposure, at which there may be a risk of exceedence to the hourly objective.

Whilst there have been no exceedences of the hourly objectives for either nitrogen dioxide and PM10 during 2014, 13 air pollution episodes in London, spanning a total of 41 days were reported by Kings College, London during 2014 (<http://www.londonair.org.uk/london/asp/public episodes.asp>). Airtex issued 23 alert days to Haringey subscribers in 2014 for poor air quality during 2014. These episodes and alert days were for primarily PM10, but some are for NO<sub>2</sub>, O<sub>3</sub> and PM2.5.

Based on the monitoring results, the number of episodes recorded by Kings College, London and Airtex alert days, it is not considered appropriate to revoke or amend the Air Quality Management Area. A detailed assessment is not required for any pollutants.

The London borough of Haringey will continue with its monitoring programme. Air quality improvement work continues to be delivered in accordance with the measures detailed in the council's Air Quality Action plan. Stakeholder engagement continues with partners including the North London Air Quality Cluster group, Department for the Environment Food and Rural Affairs, Greater London Authority and internal and external local partners.

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# **1 Introduction**

## **1.1 Description of Haringey Area**

The London Borough of Haringey is one of the 33 London boroughs and made up of the town centres of Wood Green, Tottenham, Muswell Hill and Highgate. Geographically located to the North of London, Haringey is classified as an outer London Borough is more than 11 square miles in area. It consists of the former boroughs of Hornsey, Wood Green and Tottenham, which were amalgamated in 1965. It shares borders with six other London boroughs. Clockwise from the north, they are: Enfield, Waltham Forest, Hackney, Islington, Camden and Barnet. Along the Eastern side is the Lea Valley, historically the home to heavy industry.

Today the borough of Haringey is predominantly residential with some light industry, mostly located along the eastern edge of the borough. According to the Office for National Statistics (ONS) estimates, Haringey's population in 2006 was 225,700. The GLA projections estimate Haringey's population to grow by 10.6% that is 23,800 residents over the next 25 years. Haringey has a tradition of diversity and within the borough there are more than 100 languages spoken.

A combination of the shopping areas, housing and the main road, rail and tube transport networks have all contributed to the development of different identities of Haringey. The transport networks connect the borough to the rest of London but also serve as borders within the borough, especially the north / south road, the A105 (Green Lanes) which divides the East and the West in the middle of the borough. The eastern part of the borough is urban residential with the western side of the A105 being more affluent and having more green open spaces. Major roads that traverse the borough include the A1, A10, A105, A406, A503, A1010 & A1055. Tottenham is also home to Tottenham Hotspurs Football Club; other well known landmarks include Alexandra Palace and Alexandra Park, Bruce Castle and Finsbury Park. The river Lee (Lea) follows the eastern boundary from North to South. The river is navigable but is little used.

25% of Haringey's total area consists of parks, recreation grounds and open spaces. There are also 5 distinct ancient woodlands which are Highgate Wood, Queens Wood,

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Coldfall Wood, Bluebell Wood and North Wood. Highgate Woods is one of the eight Green Heritage sites in London.

Much of Haringey, including some of its deprived neighbourhoods, has relatively good public transport. This means that employment opportunities in the City and West End are fairly easily accessible, as are the opportunities of the London-Cambridge corridor and Stansted Airport. In common with many London boroughs, Haringey suffers the effects of large amounts of through road traffic. The East Coast main line (London to Edinburgh) traverses the borough North to South. This line carries electric, diesel and occasionally coal fired engines on “special trips”. The East London line from Shoeburyness to London crosses the borough East-West. This line carries mainly electric trains with occasional diesel freight.

Whilst there are no Part A and A2 processes in the borough there are a limited number of Part B processes. There are some key regeneration projects within the borough including Tottenham and Haringey Heartlands, Tottenham High Road regeneration corridor, the Upper Lea Valley and Wood Green.

## **1.2 Purpose of Report**

This report fulfils the requirements of the Local Air Quality Management process as set out in Part IV of the Environment Act (1995), the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where exceedences are considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

The objective of this Updating and Screening Assessment is to identify any matters that have changed which may lead to risk of an air quality objective being exceeded. A checklist approach and screening tools are used to identify significant new sources or changes and whether there is a need for a Detailed Assessment. The USA report should

provide an update of any outstanding information requested previously in Review and Assessment reports.

### **1.3 Air Quality Objectives**

The air quality objectives applicable to LAQM **in England** 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 1.1. This table shows the objectives in units of microgrammes per cubic metre  $\mu\text{g}/\text{m}^3$  (milligrammes per cubic metre,  $\text{mg}/\text{m}^3$  for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).



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**Table 1.1 Air Quality Objectives included in Regulations for the purpose of Local Air Quality Management in England.**

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
<b>Benzene</b>	16.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003
	5.00 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2010
<b>1,3-Butadiene</b>	2.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003
<b>Carbon monoxide</b>	10.0 $\text{mg}/\text{m}^3$	Running 8-hour mean	31.12.2003
<b>Lead</b>	0.5 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2004
	0.25 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2008
<b>Nitrogen dioxide</b>	200 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2005
<b>Particles (PM<sub>10</sub>) (gravimetric)</b>	50 $\mu\text{g}/\text{m}^3$ , not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2004
<b>Sulphur dioxide</b>	350 $\mu\text{g}/\text{m}^3$ , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 $\mu\text{g}/\text{m}^3$ , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 $\mu\text{g}/\text{m}^3$ , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

Whilst there are obligations for Particles (PM<sub>2.5</sub>) there is no requirement for Local authorities to monitor.

## 1.4 Summary of Previous Review and Assessments

The London Borough of Haringey completed the first round of Review and Assessment (Stages 1 – 4) in January 2003. This first round concluded that of the seven key pollutants, the objective levels for both nitrogen dioxide (NO<sub>2</sub>) and fine particulates (PM10) are likely to exceed national objectives. The whole of the borough of Haringey is designated an Air Quality Management Area (AQMA) for NO<sub>2</sub> and PM10. The Council has produced the following documents to fulfil the requirements of Part IV of the Environment Act 2005:

- Following on from the declaration of the AQMA, an Air Quality Action Plan;
- an Updating and Screening Assessment (2003)
- an Action Plan Progress Report (2004),
- an Air Quality progress report and review and assessment report (2005)
- an Updating and screening assessment (2006) & Air Quality Progress Report (2006),
- an Air Quality Progress Report and Review and Assessment Report (2007)
- a Review and Assessment Report and Air Quality Action Plan Progress Report (2008).
- an Updating and Screening Assessment (2009) & Air Quality Progress Report (2009)
- a revised and Updated Air Quality Action Plan (2010)
- and an Air Quality Progress Report (2010).
- an Air Quality Progress Report and Review and Assessment Report (2010),
- an Updating and Screening Assessment (2011);
- an Air Quality progress report (2012) and Action Plan Update (2012)
- an Air Quality Progress Report and Air Quality Action Plan Update (2013).
- an Air Quality Progress Report and Air Quality Action Plan Update (2014).

This Updating and Screening Assessment follows the latest Technical Guidance LAQM.TG (09) and is a prescriptive approach to report on new monitoring data, new pollutant objectives, new sources or significant changes to existing sources and other changes that might affect air quality.

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The previous 2006, 2009 and 2012 Updating and Screening Assessments concluded that there was no requirement for a Detailed Assessment for any of the specified pollutants, and that it was pertinent to maintain the Air Quality Management Area for the whole of the Haringey, for both NO<sub>2</sub> and PM<sub>10</sub>.

Although much work has been undertaken towards improving air quality, levels of nitrogen dioxide and fine particulates continue to be a problem and so the AQMA remains appropriate for the whole of the borough of Haringey.

Many of the documents mentioned above are available at:

[www.haringey.gov.uk/airquality](http://www.haringey.gov.uk/airquality)

## 2 New Monitoring Data

### 2.1 Summary of Monitoring Undertaken

#### 2.1.1 Automatic Monitoring Sites

Haringey Council has been automatically monitoring air pollution since 1994. To date there are two automatic monitoring sites in operation within the borough; one roadside and one urban background.

Whilst there have been no new sites or sites that have closed down since the previous report; at the Haringey Roadside site the PM10 monitor was removed by defra to be deployed at a location outside of the borough. Appendix 1 shows a map of the locations of all monitoring sites, automatic and non-automatic, in the borough as at December 2014. Table 2.1 gives details of the automatic monitoring sites within the borough.

**Table 2.1 Details of Automatic Monitoring Sites**

Site Name	Site Type	OS Grid Ref	Pollutants Monitored	In AQMA?	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road	Worst-case Location?
HGY1	Roadside	X 533890 Y 190710	NO2 & PM2.5 (FDMS)	Yes	Yes (0m – residential).	4m	Yes
HGY2	Urban Background	X 529987 Y 188937	NO2 & O3	Yes	No	N/A	No

#### Data

Monitoring data is imperative to the requirement under the Environment Act 1995 for local authorities to periodically review and assess the air quality in their area.

Monitoring data provides:

- A measure of actual concentrations and exceedences of objectives
- Information on trends in air pollution
- Provides the basis for verifying the results of air quality models used to predict future air pollution.

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Both of these monitoring stations are part affiliated to the Automatic Urban & Rural Network (AURN). AURN sites have defra funding as the data is more rigorously scrutinised with traceability to EU standards. Part affiliated sites are part funded by defra and part funded by the local authority.

Defra's London AURN data manager is the Environmental Research Group (ERG), Kings College London. ERG collates the data on a daily basis, validates it before send it onto the national data managers; who ratify it to EU standards.

Routine calibrations are undertaken fortnightly (roadside site) and monthly (background site). Each site is audited bi-annually following a full service. The calibrations support the quality assurance and quality control (QA/QC) checks that are carried out on the raw data to the AURN standard. This is to ensure that:

- Data is representative of ambient concentrations in the area
- Measurements are accurate and precise in order to meet monitoring requirements
- Data can be consistently compared with data from national and international standard sites
- Measurements are consistent over time

PM2.5 levels are measured by Filter Dynamics Measurement System (FDMS). In May 2014 the Defra PM10 FDMS was removed from HGY1 and deployed at another location outside of Haringey. The PM10 data trends at the Haringey roadside site are stable over time, well below the annual objective of  $40\mu\text{g}/\text{m}^3$ .

Further information on data validation and ratification is available on the defra website:

[www.uk-air.defra.gov.uk](http://www.uk-air.defra.gov.uk)

### **2.1.2 Non-Automatic Monitoring**

For monitoring locations of diffusion tubes throughout the borough see Appendix 1.

The non-automatic sites are diffusion tube sites and all monitor for nitrogen dioxide. Diffusion tubes provide an indicative measure of the pollutant being monitored. The advantage of using diffusion tubes is that they are inexpensive and provide useful

information on pollutant variations across the borough, to identify pollution hotspots and long-term trends.

The diffusion tubes are prepared and analysed by Lambeth Scientific Services who are a UKAS accredited laboratory. This laboratory participates in the WASP scheme (Workplace Analysis Scheme for Proficiency) to meet European standards and is involved in the network field inter-comparison exercise operated by NETCEN, which assesses the sampling and analytical performance of the tubes. Nitrogen dioxide diffusion tubes are prepared using the 50% triethanolamine (TEA) in acetone method.

The Council has been monitoring for nitrogen dioxide by diffusion tube at ten locations throughout the borough since 2004. Towards the end of 2010, six of these monitoring location sites were closed and nine new locations were opened. These nine new locations were chosen as result of the latest air quality modelling that was carried out in 2009 by Bureau Veritas on behalf of the North London Cluster Group. The modelling identified hotspot locations where the hourly NO<sub>2</sub> objective may be at risk of being exceeded and where there is relevant exposure. There is currently thirteen diffusion tube monitoring locations. Table 2.2 details the individual site details with the new site highlighted in bold. The locations are a mixture of roadside and background sites. Diffusion tube ref: HR14 continues to be co-located with HGY1 automatic monitoring site; the data from which is fed into the National Diffusion Tube Co-location study.

In October 2014 two site locations were closed, HR7 and HR22. The diffusion tubes were relocated to new hotspot areas HR29 - Stamford Hill Primary School, N15 and HR30 – Earlsmead Primary School, Broad Lane, N15. Both sites are sensitive receptors and are within 150m of a main road carrying >10,000 vehicles per day.

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**Table 2.2 Details of Non- Automatic Monitoring Sites**

Site Name	Site Type	OS Grid Ref	Site Open / Closed	In AQMA?	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road	Worst-case Location?
HR06	Roadside	528940 187660	Open	Y	Y (2m)	0m	N
HR07	Urban Background	534400 190160	Closed Sept 2014	Y	N	N/A	N
HR08	Urban Background	530440 189450	Open	Y	Y	0m	Y
HR10	Roadside	530860 190690	Closed Nov 2010	Y	N	8m	N
HR13	Roadside	531460 189670	Closed Nov 2010	Y	N (6m)	3m	Y
HR14	Roadside	533890 190710	Open	Y	Y (0m – residential)	4m	Y
HR15	Roadside	528810 189690	Closed Nov 2010	Y	Y (3m)	0m	Y
HR16	Roadside	534370 189460	Closed Nov 2010	Y	N	2m	Y
HR17	Roadside	531060 190270	Closed Nov 2010	Y	Y	3m	Y
HR18	Roadside	530990 190420	Closed Nov 2010	Y	N (8m)	3m	Y
HR19	Roadside	527897 188558	Open Nov 2010	Y	Y	2m	Y
HR20	Roadside	527974 188329	Open Nov 2010	Y	Y	2m	Y
HR21	Roadside	532010 190549	Open Nov 2010	Y	Y	8m	Y
HR22	Roadside	533612 188841	Closed Sept 2014	Y	Y	3m	Y
HR23	Roadside	533720 189471	Open Nov 2010	Y	Y(15m)	10m	N
HR24	Roadside	532155 190517	Open Nov 2010	Y	Y	3m	Y
HR25	Roadside	532554 191383	Open Nov 2010	Y	Y	9m	Y

**Table 2.2 Details of Non- Automatic Monitoring Sites – cont'd**

Site Name	Site Type	OS Grid Ref	Site Open / Closed	In AQMA?	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road	Worst-case Location?
HR26	Roadside	527800 191800	Closed Feb 2013	Y	Y	1m	Y
HR27	Roadside	531758 188872	Open July 2011	Y	Y	5m	Y
HR28	Roadside	530063 191324	Open Oct 2013	Y	Y	1m	Y
<b>HR29</b>	<b>Roadside</b>	<b>532881 188049</b>	<b>Open Oct 2014</b>	<b>Y</b>	<b>Y</b>	<b>10m</b>	<b>Y</b>
<b>HR30</b>	<b>Roadside</b>	<b>535919 188987</b>	<b>Open Oct 2014</b>	<b>Y</b>	<b>Y</b>	<b>2m</b>	<b>Y</b>

All sites are indicative of relevant exposure. The diffusion tubes are located at building facades of schools and residential properties where possible. Only HR 23 is located as close as possible to the main road and is set back from the main building line.

Two sites have been closed, HR7 and HR22 and replaced with two new monitoring locations, HR 29 and HR30 which are both schools. Location HR7 was a longstanding monitoring location and so has a good data set. Results from this background location show that the NO<sub>2</sub> annual objective is achieved at this locale. Location HR22 was a monitoring site for 3½ years. Results from this roadside location show that the NO<sub>2</sub> annual objective is exceeded at this locale. The monitoring site closed as the building at this location is to be changed from offices to residential. However this locale has been identified as both an NO<sub>2</sub> hotspot area and a TfL NO<sub>2</sub> focus area. The results of the monitoring provide confirmation of this.



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### **2.2 Comparison of Monitoring Results with AQ Objectives**

#### **2.2.1 Nitrogen Dioxide**

The borough of Haringey has been designated a whole borough Air Quality Management Area (AQMA) for NO<sub>2</sub>, as have neighbouring boroughs. The principal source of nitrogen dioxide (NO<sub>2</sub>) in Haringey is from road transport; increases in which are attributed to the increase of diesel fuelled vehicles. Other releases are from combustion processes such as boiler plant and industrial emissions. It is nitrogen dioxide that is associated with adverse effects on human health and is one of the pollutants of concern within the London area. Road traffic emissions are currently the dominant source of NO<sub>x</sub> in Haringey.

#### **Automatic Monitoring Data**

Tables 2.3a and b illustrate the annual mean and 1-hour mean monitored data from the two automatic monitoring sites operating within the borough. Exceedences of the objectives are in red.

Both automatic monitoring locations are representative of public exposure. As can be seen from the table, the roadside site, HGY 1 again measured exceedences of the annual objective for NO<sub>2</sub>. For this site the nearest relevant exposure are residential properties <4m from the kerb; the sample inlet is in line with the building façades. This demonstrates relevant exposure and that the Council was correct in its decision to declare an AQMA for the whole borough for NO<sub>2</sub>.

HGY2 is located in a local park and is classified as an urban background site. At this location the annual objective of 40µg/m<sup>3</sup> has been achieved. The overall NO<sub>2</sub> trend remains steady. This site is not representative of relevant exposure with the London area, it is located in an open park.

The hourly NO<sub>2</sub> objective was achieved at both monitoring locations, except in 2007 at the HGY 1 site. However this uncharacteristic exceedence could have been as a result of local building or road works taking place.

The data capture rate was low due to the poor level of service of the LSO.



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**Table 2.3a Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with Annual Mean Objective**

Site ID	Location	Annual mean concentrations ( $\mu\text{g}/\text{m}^3$ )														
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
HGY1	High Road, N17	51	48	46	52	46	42	43	42	37	42	45 (97%)	38 (74%)	42(81%)	43(100%)	48(65%)
HGY2	Priory Park N8	37	38	35	37	34	34	33	32	32	34	34 (99%)	29 (85%)	NA**	Closed	Closed
HGY 4	Priory Park, N8													NA**	26(100%)	24(74%)

(%) valid data capture rate for NO<sub>2</sub> for that year.

\*\* Lack of data due to site relocation

**Table 2.3b Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with 1-hour Mean Objective**

Site ID	Location	Number of exceedences of hourly mean (200 $\mu\text{g}/\text{m}^3$ )														
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
HGY1	High Road, N17	0	0	0	0	0	1	0	21	0	0	0 (97%)	0(74%)	0(81%)	1	0(65%)
HGY2	Priory Park N8	0	0	0	0	0	0	0	3	0	4	0 (99%)	0 (85%)	NA**	Closed	Closed
HGY4	Priory Park, N8													NA**	0 (100%)	0(74%)

(%) valid data capture rate for NO<sub>2</sub> for that year.

\*\* Lack of data due to site relocation

**Data affected by Tottenham riots.**  
All data is ratified to AURN standards.



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### Diffusion Tube Monitoring Data

All the diffusion tube results have been appropriately bias adjusted, using the analytical laboratory adjustment factors. These are highlighted in bold, with bias adjusted exceedences in red. Data is for a 12 month period and tubes are exposed in accordance with the UK Defra guidance LAQM.TG(09).

Diffusion tubes are considered to have limitations and have poor accuracy. In 2000 the government recommended that tubes should be co-located with an automatic analyser to determine a bias adjustment factor, which is then applied to the raw annual average concentrations for the same year to obtain bias adjusted results. Haringey co-locates a diffusion tube at HGY1 (High Road, Tottenham) and submits the data annually. It is the laboratory average adjustment factor (Lambeth Scientific Services) that is applied to the raw annual average concentrations for the correct year to obtain the bias adjusted results. The bias adjustment factors are on the website;

<http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html>

The bias adjustment factor used for 2014 is 0.80

The raw data from the co-located diffusion tube is submitted annually to the NO<sub>2</sub> diffusion tube network data managers for verification of the diffusion tubes and calculation of the laboratory bias adjustment factor.

Tables 2.4a and b illustrates the annual mean measured data from diffusion tube sites within the borough.

**Table 2.4a Results of Nitrogen Dioxide Diffusion Tubes**

Location	2011( $\mu\text{g}/\text{m}^3$ )	2012( $\mu\text{g}/\text{m}^3$ )	2013( $\mu\text{g}/\text{m}^3$ )	2014( $\mu\text{g}/\text{m}^3$ )
<b>Bias Adjustment Factor</b>	<b>1.06</b>	<b>0.91</b>	<b>0.83</b>	<b>0.80</b>
<b>HR06</b>	58.5 <b>(62)</b>	76.1 <b>(69)</b>	67.8 <b>(56)</b>	53 <b>(42)</b>
<b>HR07</b>	30.8 <b>(33)</b>	35 <b>(32)</b>	35.3 <b>(29)</b>	30.9 <b>(25)</b>
<b>HR08</b>	34.8 <b>(37)</b>	34.9 <b>(32)</b>	36.3 <b>(30)</b>	31 <b>(25)</b>
<b>HR14**</b>	41.7 <b>(44)</b>	50.7 <b>(46)</b>	46.7 <b>(39)</b>	45.9 <b>(37)</b>
<b>HR19</b>	38.5 <b>(41)</b>	50.4 <b>(46)</b>	48.9 <b>(41)</b>	42.6 <b>(34)</b>

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Location	2011( $\mu\text{g}/\text{m}^3$ )	2012( $\mu\text{g}/\text{m}^3$ )	2013( $\mu\text{g}/\text{m}^3$ )	2014( $\mu\text{g}/\text{m}^3$ )
<b>Bias Adjustment Factor</b>	<b>1.06</b>	<b>0.91</b>	<b>0.83</b>	<b>0.80</b>
HR20	36.80 <b>(39)</b>	40.4 <b>(37)</b>	37.9 <b>(32)</b>	36.4 <b>(29)</b>
HR21	38.1 <b>(40)</b>	36.2 <b>(33)</b>	41.9 <b>(35)</b>	36.9 <b>(30)</b>
HR22	46.3 <b>(49)</b>	53.2 <b>(48)</b>	50.3 <b>(42)</b>	46.7 <b>(38)</b>
HR23	39.3 <b>(42)</b>	41.1 <b>(37)</b>	48.8 <b>(41)</b>	37.7 <b>(30)</b>
HR24	42 <b>(45)</b>	45.7 <b>(42)</b>	49.9 <b>(41)</b>	41.4 <b>(33)</b>
HR25	34.2 <b>(36)</b>	40.3 <b>(37)</b>	40.8 <b>(34)</b>	40.8 <b>(34)</b>
HR26	47.2 <b>(50)</b>	53.8 <b>(49)</b>	—	—
HR 27	39.7 <b>(42)</b>	48.6 <b>(44)</b>	48.7 <b>(40)</b>	40.5 <b>(33)</b>
HR28	—	—	48.3 <b>(40)</b>	37 <b>(30)</b>
HR29	—	—	—	Only 2 months data
HR 30	—	—	—	Only 2 months data

\*\* Co-located diffusion tube with NO<sub>2</sub> analyser – HGY1

Bias adjusted results are highlighted in bold using the analysing laboratory adjustment factors. Those highlighted in red indicate an exceedence of the annual objective. Sites HR07 and HR22 were closed in October and replaced with sites HR29 and HR30 – which are schools in identified NO<sub>2</sub> hotspot areas.

All of the sites are roadside sites, except the new site HR29, which is in a school playground. All of the sites represent relevant exposure indicating the NO<sub>2</sub> concentrations at residential façades and schools. HR06, which is located on a building façade on the A1 (Archway Road), is the only site to show an exceedence of the hourly objective. It is indicative of relevant exposure with residential dwellings fronting this major road through London.

With the exception of 3 sites, all of the diffusion tubes above are located in or adjacent to hotspot locations, as identified by the Bureau Veritas AQ modelling.

**Table 2.4b Historical Results of Nitrogen Dioxide Diffusion Tubes Monitoring**

Annual Mean Concentrations ( $\mu\text{g}/\text{m}^3$ ) – adjusted for bias.							
	2004	2005	2006	2007	2008	2009	2010
Bias adjustment Factor	1.19	1.24	1.28	1.07	0.98	1.03	1.08
HR06	74	70	69	67	72	72	72
HR07	37	35	34	36	32	33	38
HR08	36	36	38	27	34	35	36
HR10	56	34	30	27	39	33	39
HR13	77	77	85	75	74	75	71
HR14	39	47	55	36	46	48	47
HR15	60	52	62	50	44	55	57
HR16	57	60	62	49	60	69	24
HR17	70	85	96	69	73	86	69
HR18	70	57	65	59	69	66	69

### 2.2.2 PM<sub>10</sub>

The London Borough of Haringey is designated an AQMA for PM<sub>10</sub>, as have neighbouring boroughs. The principal source of PM<sub>10</sub> in Haringey is attributed to diesel fuelled vehicles, in particular HGVs, LGVs and buses. This was illustrated at the Stage IV Review and Assessment. These small particles (<10µm diameter) can be breathed into the deepest parts of the lung, carrying with them a range of both natural and man made substances and are associated with both respiratory and cardio-vascular health problems.

The principal sources of fine particulates (PM<sub>10</sub>) can be divided into three main categories; *Primary Sources* - from combustion sources including road traffic, power generation and industrial combustion, *Secondary sources* - formed from chemical reactions in the atmosphere and *Coarse Sources* – all other sources including resuspended dusts, construction work dust, mineral extraction works, wind-blown dusts and soils, including sea salt and biological particles.

See section 2.1.1 for an explanation of data management and validation. Tables 2.5a and b illustrate the annual mean and 24hour means monitored data from the automatic monitoring sites operating within the borough. All results from TEOM PM<sub>10</sub> analysers from 2004 onward have been converted to reference equivalence using the volatile correction method.

In June 2009 an FDMS (Filter Dynamics Measurement System) was installed at the HGY1 site to measure concentrations of PM<sub>2.5</sub>. The results are not reported here as local authorities do not have responsibility for PM<sub>2.5</sub>; the Government's approach is to set a national exposure reduction target defined as a percentage reduction in annual average concentrations of PM<sub>2.5</sub>.

The tables show there has been no exceedences of either the annual mean PM<sub>10</sub> or the 24 hour mean objective. For HGY1 the nearest relevant exposure is residential properties which are within 4m from the kerbside. Defra removed the PM<sub>10</sub> monitor for use at another location outside of Haringey. HGY2 is located in a park and is classified as an urban background site. This site is not representative of relevant exposure with the London area. Haringey no longer monitors for PM<sub>10</sub>.



# London Borough of Haringey

**Table 2.5a Results of PM<sub>10</sub> Automatic Monitoring: Comparison with Annual Mean Objective**

Site ID	Location	Within AQMA?	Annual mean concentrations (µg/m <sup>3</sup> )														
			2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014 **
HGY1	High Road, N17	Y	26	27	27	29	23	24	24	26 (72%)	21 (66%)	21	23	NA	23	25	No data
HGY2	Priory Park N8	Y	22	25	26	29	30	23	26	26 (68%)	20	18	17	19*	N/A	–	–

(%) Data capture rate – where below 75%

Data for year is not fully ratified.

■ Data affected by Tottenham riots.

**Table 2.5b Results of PM<sub>10</sub> Automatic Monitoring: Comparison with 24-hour Mean Objective**

Site ID	Location	Within AQMA?	Number of Exceedences of daily mean objective (50 µg/m <sup>3</sup> )														
			If data capture < 90%, include the 90 <sup>th</sup> %ile of daily means in brackets.														
			2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014 **
HGY1	High Road, N17	Y	12	14	15	34	7	16	11	22 (72%)	6 (66%)	5	9	NA	11	13	No data
HGY2	Priory Park N8	Y	11	12	11	34	17	13	10	13 (68%)	8	1	1	8*	–	–	–

(%) Data capture rate – where below 75%

\*Data for year is not fully ratified.

■ Data affected by Tottenham riots.

\*\* PM10 analyser removed from site.



## **London Borough of Haringey**

### **2.2.3 Sulphur Dioxide**

The principal source of sulphur dioxide (SO<sub>2</sub>) is from power stations and industrial combustion sources. Other sources include domestic and commercial heating.

Concentrations of sulphur dioxide have declined as a result of industries switching from oil or coal-fired heating to gas-fired heating and reductions in the sulphur content of vehicle fuel.

As Sulphur Dioxide is no longer a pollutant of concern in Haringey, the London Borough of Haringey no longer monitors sulphur dioxide. Monitoring for this pollutant stopped in March 2011.

### **2.2.4 Benzene**

#### **Monitoring Data**

The first round of review and assessment identified no exceedences of the benzene objective in the borough of Haringey. This pollutant is not monitored

### **2.2.5 Other pollutants monitored**

Ozone is monitored for at the HGY 2 site. Ozone is not a pollutant of concern for Local Authorities and so is not reported on in this assessment.

### **2.2.6 Summary of Compliance with AQS Objectives**

The London Borough of Haringey has examined the results from monitoring in the borough. Overall Nitrogen dioxide measured concentrations have decreased and are below the AQS objectives with the exception of two locations where the annual objective is exceeded. The whole borough is declared an Air Quality Management Area for nitrogen dioxide; there is no requirement to proceed to a detailed assessment.

### **3 Road Traffic Sources**

#### **3.1 Narrow Congested Streets with Residential Properties Close to the Kerb**

The London Borough of Haringey confirms that there are no new/newly identified congested streets with a flow above 5,000 vehicles per day and residential properties close to the kerb, that have not been adequately considered in previous rounds of Review and Assessment.

#### **3.2 Busy Streets Where People May Spend 1-hour or More Close to Traffic**

The London Borough of Haringey confirms that there are no new/newly identified busy streets where people may spend 1 hour or more close to traffic.

#### **3.3 Roads with a High Flow of Buses and/or HGVs.**

The London Borough of Haringey confirms that there are no new/newly identified roads with high flows of buses/HGVs.

#### **3.4 Junctions**

The London Borough of Haringey confirms that there are no new/newly identified busy junctions/busy roads.

### **3.5 New Roads Constructed or Proposed Since the Last Round of Review and Assessment**

The London Borough of Haringey confirms that there are no new/proposed roads.

### **3.6 Roads with Significantly Changed Traffic Flows**

The London Borough of Haringey confirms that there are no new/newly identified roads with significantly changed traffic flows.

### **3.7 Bus and Coach Stations**

The London Borough of Haringey confirms that there are no relevant bus stations in the Local Authority area.

## **4 Other Transport Sources**

### **4.1 Airports**

The London Borough of Haringey confirms that there are no airports in the Local Authority area.

### **4.2 Railways (Diesel and Steam Trains)**

The London Borough of Haringey confirms that there are no locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m.

#### **4.2.1 Stationary Trains**

The London Borough of Haringey confirms that there are no locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m.

#### **4.2.2 Moving Trains**

The London Borough of Haringey confirms that there are no locations with a large number of movements of diesel locomotives, and potential long-term relevant exposure within 30m.

### **4.3 Ports (Shipping)**

The London Borough of Haringey confirms that there are no ports or shipping that meets the specified criteria within the Local Authority area.

## **5 Industrial Sources**

### **5.1 Industrial Installations**

#### **5.1.1 New or Proposed Installations for which an Air Quality Assessment has been carried out**

The London Borough of Haringey confirms that there are no new or proposed industrial installations for which planning approval has been granted within its area or nearby in a neighbouring authority.

#### **5.1.2 Existing Installations where Emissions have increased substantially or New Relevant Exposure has been introduced**

The London Borough of Haringey confirms that there are no industrial installations with substantially increased emissions or new relevant exposure in their vicinity within its area or nearby in a neighbouring authority.

#### **5.1.3 New or Significantly Changed Installations with No Previous Air Quality Assessment**

The London Borough of Haringey confirms that there are no new or proposed industrial installations for which planning approval has been granted within its area or nearby in a neighbouring authority.

### **5.2 Major Fuel (Petrol) Storage Depots**

There are no major fuel (petrol) storage depots within the Local Authority area.

### **5.3 Petrol Stations**

The London Borough of Haringey confirms that there are no petrol stations meeting the specified criteria.

## 5.4 Poultry Farms

The London Borough of Haringey confirms that there are no poultry farms meeting the specified criteria.



## 6 Commercial and Domestic Sources

### 6.1 Biomass Combustion – Individual Installations

The table below identifies known biomass boilers in operation within the London Borough of Haringey area. As can be seen from the table, information regarding these is vague

Location	Biomass Plant	Assessment Information
Tottenham Hale Village	2 x Lin-Ka 1.6 MW (aggregated to > 3MW).	An air quality assessment was carried out as part of the planning application and the biomass was assessed as not having a significant impact on the nearest residential receptors.
Woodside High School	Borag-Gilles 240Kw.	Installed during summer 2010. An air quality assessment has not been submitted with the planning application.
Hornsey Depot, N8 – Network Rail	300kW – Max combustion rate – 106Kg/h.	Installed in 2012. An air quality assessment was submitted with the planning application – the biomass was assessed as not having a significant impact.
308 West Green Road, N15 3QR	No information.	

### 6.2 Biomass Combustion – Combined Impacts

The London Borough of Haringey confirms that there are biomass combustion plants in the Local Authority area – see above. All have been assessed for impact on local air quality at the planning stage.

### 6.3 Domestic Solid-Fuel Burning

The London Borough of Haringey confirms that there are no areas of significant domestic fuel use in the Local Authority area.

## **7 Fugitive or Uncontrolled Sources**

The London Borough of Haringey confirms that there are no potential sources of fugitive particulate matter emissions in the Local Authority area.

## 8 Conclusions and Proposed Actions

### 8.1 Conclusions from New Monitoring Data

The pollutants of concern in Haringey, as most of London are NO<sub>2</sub> and PM10. New monitoring data for 2014 shows no exceedences of the PM10 annual mean and 24 hour objective; although monitoring for this pollutant is no longer carried out. Although monitoring for PM2.5 is carried out in Haringey, it is not reported on here as it is not a pollutant of local authority requirement. NO<sub>2</sub> levels have been exceeded or are close to the annual objective at monitoring locations adjacent busy roads. Monitoring data indicates no exceedences of the hourly NO<sub>2</sub> objective; which generally occurs where the annual mean is above 60µg/m<sup>3</sup>. All monitoring undertaken is within the Air Quality Management Area (AQMA).

These results continue to demonstrate that it is not appropriate to revoke the 'Air Quality Management Area' status for the London Borough of Haringey. The elevated levels of NO<sub>2</sub> are due to diesel fuelled vehicles; such as buses, HGV's, vans and also as a direct result of the diesel particulate filters fitted to London buses and HGV's. These filters deliberately produce NO<sub>2</sub> to help oxidise particles.

### 8.2 Conclusions from Assessment of Sources

There are no new local sources that might affect local air quality, such as.

- New industrial processes
- New retail or mixed use developments that could significantly change traffic flows
- New landfills sites, quarries etc with nearby public exposure
- New road schemes or significant changes to existing road schemes

There are no landfills, quarries or Part A/A1 industrial processes in Haringey. With respect to 'Part B' permitted installations, in December 2014 there were a total of 4 industrial premises, 16 service stations and 44 dry cleaner premises permitted.

The majority of new or planned developments over the last year have been residential or mixed-use developments. Very few are large enough to have a significant impact on local traffic flows. Major developments approved during the year for which air quality was a consideration include:

- St Ann's redevelopment - mixed use development to include residential and hospital services. The air quality assessment considered that there would be exceedences of the NO<sub>2</sub> objective adjacent the main road.
- 332 – 334 High Road, N15 - the air quality assessment determined exceedences of and mitigation measures were conditioned.
- Hornsey re-Use and Recycling Centre, High Street, Hornsey, N8 – the air quality assessment determined no exceedences of any AQ objectives.

Major planning applications for which air quality was not considered are:

- Image House, Station Road, N17 – 96 Bedroom Hotel
- Vacant land between 17 & 34 Pretoria Road, London, N17 – four storey building providing 52 residential units.

Haringey endeavours to use the planning process to minimise the impact on local traffic to prevent increases in congestion and worsening air quality. Not all planning applications require a detailed air quality assessment to be carried out, but an effort is made to consider each major application with a regard to air quality, particularly in hotspot areas.

There have been no new road schemes or significant changes to existing road schemes which will impact on air quality.

Notwithstanding the above, biomass boilers can have an impact on local air quality, particularly for NO<sub>2</sub> emissions.

The increase in construction and demolition will have a local influence on air quality. Such fugitive sources have been factored into the AQMA for PM<sub>10</sub>; so no changes are required.

## **8.3 Proposed Actions**

The updating and screening assessment has not identified the need for any detailed assessment for any pollutant and has not identified the need for any additional monitoring or changes to the existing programme.

Haringey's automatic monitoring stations are affiliated to the national automatic network, the AURN. Monitoring of hotspot locations will continue to be carried out by diffusion tubes for the foreseeable future.

Planning applications will continue to be considered for demolition and construction dust impacts and conditioned accordingly; with respect to the guidance detailed in the Greater London Authority's Supplementary Planning Guidance document for The Control of dust and Emissions during Construction and Demolition.

## 9 References

- **The Increasing Importance of Primary NO<sub>2</sub> emissions**  
David Carslaw, University of Leeds, 2007.
- **Local Air Quality Management Technical Guidance**  
LAQM.TG(09)
- [www.LondonAir.Org](http://www.LondonAir.Org)
- [www.uk-air.defra.gov.uk](http://www.uk-air.defra.gov.uk)
- **LB Haringey Borough Profile 2008**
- **Haringey's Sustainable Community Strategy 2007 - 2016**
- **Diffusion tube inter-comparison exercise**  
<http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html>
- **The Control of Dust and Emissions during Construction and Demolition (GLA)**  
[https://www.london.gov.uk/sites/default/files/Dust%20and%20Emissions%20SPG%208%20July%202014\\_0.pdf](https://www.london.gov.uk/sites/default/files/Dust%20and%20Emissions%20SPG%208%20July%202014_0.pdf)

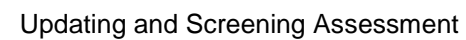
## **Appendices**

### **Appendix 1: Monitoring Station locations.**





April 2015



Licence number 100019199 (2015).





## **Appendix A: QA:QC Data**

### **Diffusion Tube Bias Adjustment Factors**

The diffusion tubes are prepared and analysed by Lambeth Scientific Services who are a UKAS accredited laboratory. This laboratory participates in the WASP scheme (Workplace Analysis Scheme for Proficiency) to meet European standards and is involved in the network field inter-comparison exercise operated by NETCEN, which assesses the sampling and analytical performance of the tubes.

Nitrogen dioxide diffusion tubes are prepared using a 50% triethanolamine (TEA) in acetone.

### **Factor from Local Co-location Studies (if available)**

One diffusion tube is co-located with an automatic analyser for NO<sub>2</sub>. This is at the High Road monitoring site (HGY1). All diffusion tube results have been appropriately bias adjusted, using the analytical laboratory adjustment factors; as only one diffusion tube is co-located.

For all diffusion tube results, both raw and bias adjusted measured data, see Tables 2.4a and 2.4b

### **PM Monitoring Adjustment**

All TEOM data reported in this report has been ratified and validated by (Environmental Research Group) ERG, Kings College, London and included in the London Air Quality Monitoring Network.

### **Short-term to Long-term Data adjustment**

Not applicable as none carried out.

### **QA/QC of automatic monitoring**

As mentioned previously, all automatic monitoring data is validated and ratified by the Environmental Research Group (ERG). Fortnightly calibrations are carried out by the LSO.

### **QA/QC of diffusion tube monitoring**

Co-ordination of a quality assurance/quality control (QA/QC) framework, aimed at the analytical laboratories that supply and analyse the diffusion tubes currently comprises

- Promotion of the independent Workplace Analysis Scheme for Proficiency (WASP), operated by the Health and Safety Laboratory, with yearly assessment against agreed performance criteria.
- Operation of a field intercomparison exercise, in which diffusion tubes are co-located with an automatic analyser: from January 2006 this is at a roadside site.
- Operation of a QC solution testing scheme. Participation is recommended for any laboratory that prepares or analyses NO<sub>2</sub> diffusion tubes used by Local Authorities for LAQM purposes.

Quarterly summaries of participating laboratories' performance in the WASP scheme over the preceding 12 months, prepared by AEA, are available by clicking on the links below:

<http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html>

## **Appendix B: DMRB Calculations**

No DMRB calculations conducted.



**London Borough of Haringey**

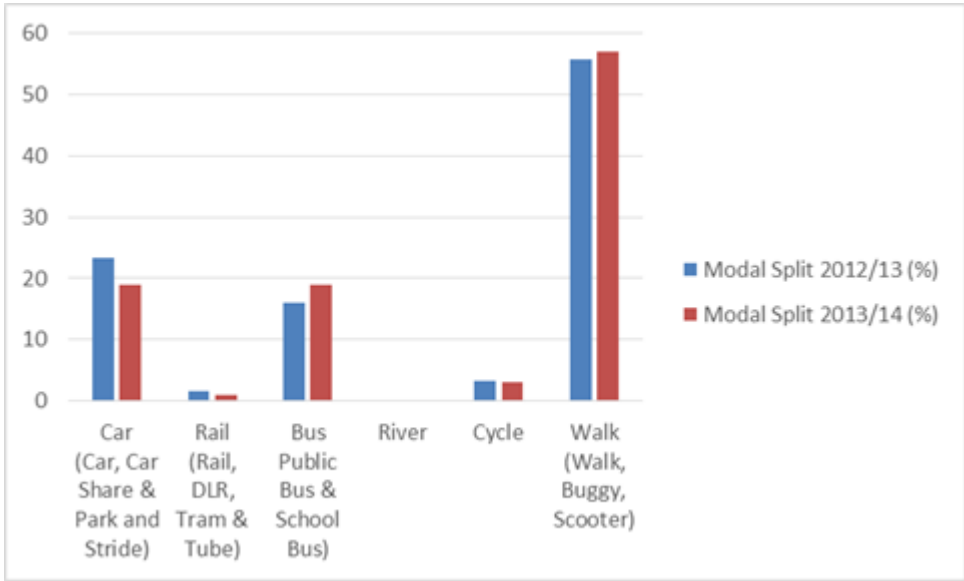
**London Borough of Haringey  
Air Quality Action Plan Measures  
2014 Update**

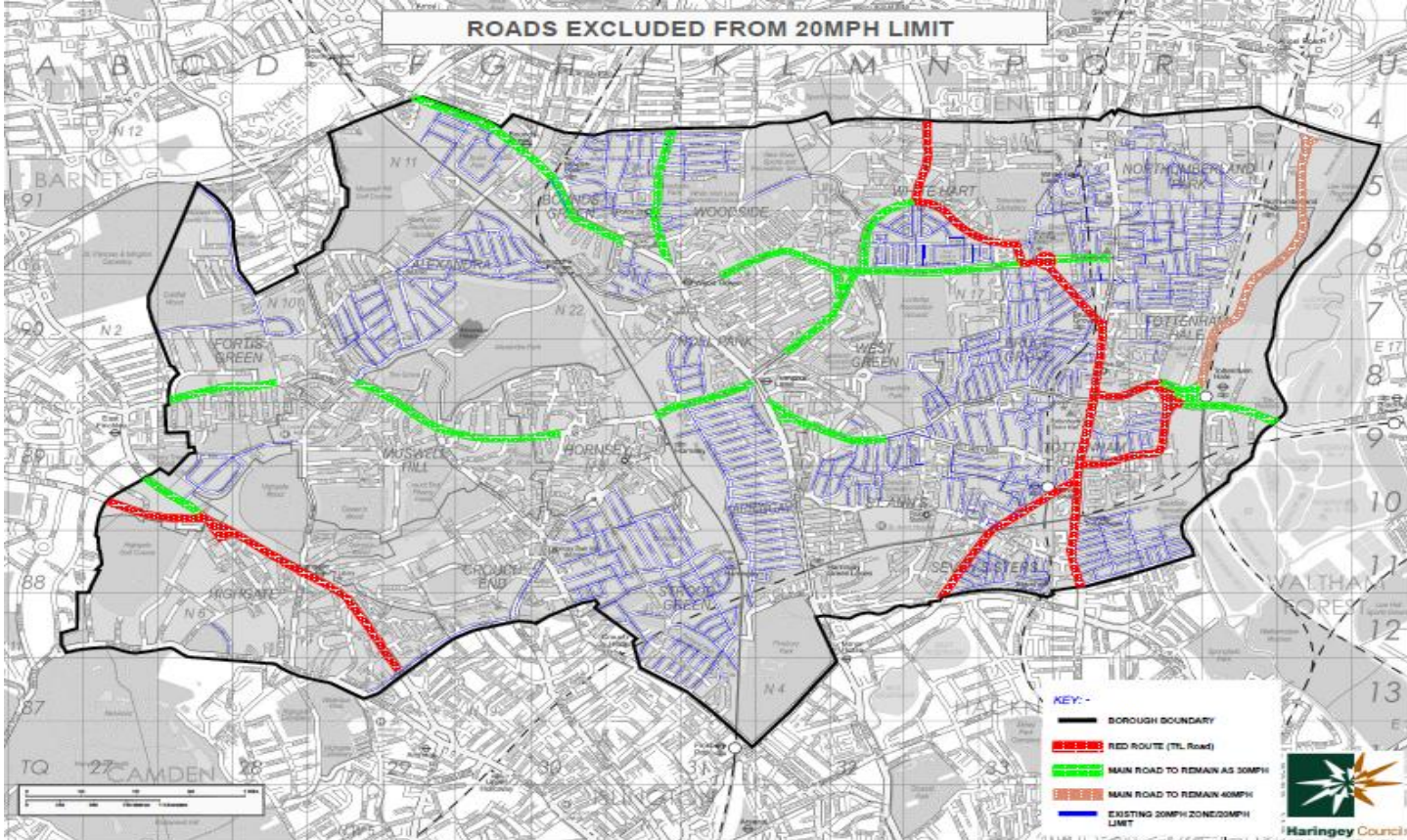
Action Plan Progress

Measure 1	To Lead by Example and Reduce Emissions from the Council Fleet
<p><b>Progress</b></p>	<p>The council owned vehicle fleet has diminished due to outsourcing, with only a handful of council owned vehicles remaining. Vehicles remaining in council ownership are compliant with the requirements of the Low Emission Zone.</p> <p>In 2014 two Mitsubishi I-Miev (100% electric) vehicles were acquired in Haringey's Council fleet for general staff use.</p>
Measure 2	Electric Vehicle Charging Points
<p><b>Progress</b></p>	<p>BluePointLondon (BPL) took over ownership of the Source London charging network from TfL on 1<sup>st</sup> September 2014 including Haringey's 17 charging point locations (providing 21 charging parking spaces), which remain part of the Source London network.</p> <p>Haringey Council are in the process of signing a variation agreement allowing BPL to take over maintenance responsibilities and associated costs, such as repairs, insurance and electricity use for Haringey's Source London Charging network. The Council will also receive a fixed amount per year per dedicated EV bay (based on Haringey's charging points being in Zone 3 of London Underground zone). An additional 20% of cumulated net profit will be proportionally shared with partners once BPL is profitable and pro-rata of the number of points in boroughs. BPL will also invest in expanding the network of points (including costs), as part of plans to install 6000 new charging points across the Source London network and will raise awareness to encourage electric vehicle uptake.</p>
Measure 3	Car Clubs
<p><b>Progress</b></p>	<p>Haringey's Zipcar fleet remains at 72 vehicles at the end of 2014. During 2014 member levels and vehicle utilisations began rising again following a slow down in 2013; a consequence of the effects of increased fleet operational costs and the economic recession. The sector is confident of further growth during 2015 and beyond.</p> <p>Looking forward, Haringey Council will be introducing multi operator contracts for on street car club provision in Haringey, when the current single operator contract with Zipcar expires in the summer of 2015. The benefits of introducing a multi operator car club market in Haringey will include:</p> <ul style="list-style-type: none"> <li>• Providing existing car club members with a greater choice of car club vehicles to access.</li> <li>• Increasing car club vehicle accessibility will encourage new membership and facilitate further car club expansion. Increasing operator choice also benefits developers looking to install car club vehicles in new developments.</li> <li>• The multi operator approach will build on the network built on the momentum and success of the borough's existing car club network and growing membership base established by Zipcar over the last 6 years.</li> </ul>



## London Borough of Haringey

Measure 4	Travel Plans																					
Progress	<p>LBH encourages and supports all schools across the borough to develop and implement school travel plans. These travel plans demonstrate how schools are implementing initiatives to make travel safer and more sustainable for students, parents and staff. They are an important tool to encourage modal shift. Engaged schools have access to additional resources, as well as enabling the STH team to promote initiatives and messages more effectively.</p> <p>17 schools had travel plans in the academic year 2011-12. 2012-13 saw a more than twofold increase in the number of schools with travel plans to 46. In 2013-14, the figure increased again, to 52 schools. With a total of 69 schools in the borough, this means over three quarters now have travel plans.</p> <p>Mode shares (%) for LBH schools with travel plans <b>Source: TfL (2014)</b> <a href="http://www.tfl.gov.uk/stars">www.tfl.gov.uk/stars</a></p> <div><table><caption>Mode shares (%) for LBH schools with travel plans</caption><thead><tr><th>Mode</th><th>Modal Split 2012/13 (%)</th><th>Modal Split 2013/14 (%)</th></tr></thead><tbody><tr><td>Car (Car, Car Share &amp; Park and Stride)</td><td>23</td><td>19</td></tr><tr><td>Rail (Rail, DLR, Tram &amp; Tube)</td><td>2</td><td>1</td></tr><tr><td>Bus (Public Bus &amp; School Bus)</td><td>16</td><td>19</td></tr><tr><td>River</td><td>0</td><td>0</td></tr><tr><td>Cycle</td><td>3</td><td>3</td></tr><tr><td>Walk (Walk, Buggy, Scooter)</td><td>55</td><td>57</td></tr></tbody></table></div> <p>A Workplace Travel Plan Officer is shared with the Boroughs of Enfield, Haringey and Waltham Forest. With Green issues at the top of the political agenda an effective travel plan can help an organisation to reduce air pollution and provide sustainable travel options. To ensure that this is as effective as possible, STH actively works with the business community to encourage the adoption of travel plans and other sustainable transport initiatives, on a voluntary basis. In 2014, 15 of the larger local organisations successfully implemented workplace travel plan measures, such as cycle training and free oyster cards. STH will continue to provide ongoing support and monitoring in 2015.</p>	Mode	Modal Split 2012/13 (%)	Modal Split 2013/14 (%)	Car (Car, Car Share & Park and Stride)	23	19	Rail (Rail, DLR, Tram & Tube)	2	1	Bus (Public Bus & School Bus)	16	19	River	0	0	Cycle	3	3	Walk (Walk, Buggy, Scooter)	55	57
Mode	Modal Split 2012/13 (%)	Modal Split 2013/14 (%)																				
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Cycle	3	3																				
Walk (Walk, Buggy, Scooter)	55	57																				

Measure 5	20 mph zones / DIY streets
<p><b>Progress</b></p>	<p>Haringey Council consulted residents on proposals to introduce 20mph zone on all Council maintained roads following Cabinet approval on 18<sup>th</sup> June 2013. Subsequently the Council's Cabinet approved the introduction of a 20mph limit for all residential roads and roads in the borough's town centres, with the exception of main roads which at this stage are retained as 30mph. The attached map shows the excluded roads from the 20mph limit. A statutory notification is planned for 2015 for the possible introduction of the 20mph limit in the borough.</p>  <p>DIY streets were renamed to Community Streets projects in 2013, when 2 such projects were implemented; in Warwick Gardens area and Hornsey. Further Community Streets schemes commenced in the Tottenham Hale, Tottenham Green and Hornsey Park neighbourhoods areas in 2014/15. Community engagement is undertaken to identify issues and priorities for further development, along with the delivery of a series of quick win projects including tree planting, bike hangars, street lighting improvements and decluttering.</p>

## London Borough of Haringey

<b>Measure 6</b>	<b>No Idling Zones</b>
<b>Progress</b>	No progress has been made. There have been no amendments / changes to the legislation; the Fixed Penalty fine for idling vehicles remains at £20.
<b>Measure 7</b>	<b>Green Travel Promotion</b>
<b>Progress</b>	<p>There are a number of national and local campaigns to encourage take-up of sustainable modes of transport promoted by Haringey's Smarter Travel Team, more information can be found at <a href="http://www.haringey.gov.uk/index/environment_and_transport/travel/smartertravel.htm">http://www.haringey.gov.uk/index/environment_and_transport/travel/smartertravel.htm</a>.</p> <p>Marketing and promotional activity during 2013-14 was both intensive and extensive. A variety of marketing materials were produced using different media, and a total of <b>26 events</b> were run. During 2013-14, STH events interacted with over <b>1,300 people</b>. The STH and Road Safety Education web pages saw an <b>increase in views</b> between 2012-13 and 2013-14, <b>19% overall and 116% relating to cycling web pages</b>.</p> <p>A survey conducted at STH road shows found that <b>35% of respondents had heard of STH prior to visiting a road show, an increase compared with the previous year's results</b>. Results from a survey undertaken at Walk and Cycle to the Shops events, showed that a similar proportion of respondents, 32%, had heard of STH prior to attending an event.</p> <p>A range of active travel projects were carried out in 2013-14, including five funded via community grants. All of these projects <b>reached a large number of local people, with encouraging outcomes</b>, e.g.:</p> <ul style="list-style-type: none"> <li>• 24 participants on the Bikeworks Recycle the Way you Travel bike maintenance and training course, who provided excellent feedback</li> <li>• 32% increase in number of school pupils receiving cycle training and 59% increase in number of other individuals receiving cycle training from 2012-13 to 2013-14</li> <li>• 149 activities delivered through Bike It+, with all six participating schools increasing the number of pupils regularly cycling to school</li> <li>• over 1,000 participants in the Pedal Power Cycling Club</li> <li>• a 52% increase in the number of Dr Bike sessions delivered and a 183% increase in the number of bikes repaired/serviced between 2012-13 and 2013-14.</li> </ul>

Measure 8	Cycle Routes and Cycle Parking																																												
Progress	<p>Haringey has a network of cycle routes across the borough including cycle lanes on main roads, separated cycle lanes and special fully signed, quiet routes. The borough is also part of the London Cycle network with cycle routes linking into those in neighbouring boroughs.</p> <p>The council has produced ‘Smarter Travel Cycling Guide’ detailing information such as bicycle types, safety tips, local bike shops, cycle clubs operating in Haringey, tips on bike security and suggested routes. It is one of the most popular of the Smarter Travel marketing materials. In a Personal Travel Planning Project undertaken in 2014 over 1200 guides were requested by local residents. The council works closely with TfL to develop new cycle routes, including the redevelopment of the Tottenham one way system into two way and CS1. Consultation is still ongoing regarding a proposed electric bike scheme in the west of the Borough.</p> <p>A total of 30 cycle stands and a “Bikehangar” with spaces for six bikes were installed during the 2013-14 financial year. A total of 39 additional cycle stands are planned for 2015, which will bring the total number of cycle stands across Haringey to 736. The council, through the Smarter Travel Programme, continues to offer cycle training to schools and individuals.</p> <p>The following table shows the numbers of school pupils and other individuals trained. There has been an upwards trend in the numbers trained over 2008-14. The number of school pupils trained between 2013-14 shows a 32% increase and the number of other individuals trained shows a 50% increase over the previous year’s figures.</p> <table><tr><th rowspan="2"></th><th colspan="5">April to April</th><th>April to March</th><th>April to March</th><th>April to August</th></tr><tr><th>2007-8</th><th>2008-9</th><th>2009-10</th><th>2010-11</th><th>2011-12</th><th>2012-13</th><th>2013 -14</th><th>2014</th></tr><tr><td>School pupils</td><td>432</td><td>626</td><td>728</td><td>551</td><td>684</td><td>761</td><td>1,004</td><td>378</td></tr><tr><td>Individuals 1:1</td><td>143</td><td>142</td><td>211</td><td>179</td><td>229</td><td>239</td><td>359</td><td>267</td></tr><tr><td>Totals</td><td>575</td><td>768</td><td>939</td><td>730</td><td>913</td><td>1,000</td><td>1,363</td><td>645</td></tr></table> <p>The council continues to work with the Haringey Cycling Campaign <a href="http://www.haringeycyclists.org">www.haringeycyclists.org</a></p>		April to April					April to March	April to March	April to August	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13	2013 -14	2014	School pupils	432	626	728	551	684	761	1,004	378	Individuals 1:1	143	142	211	179	229	239	359	267	Totals	575	768	939	730	913	1,000	1,363	645
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## London Borough of Haringey

Measure 9	North London Transport Forum
<p><b>Progress</b></p>	<p>Whilst Haringey council continues to work with TfL on improvements to transport modes, of air quality concern are the TfL improvement works to the Tottenham Hale Gyratory system; including returning the one way system to a 2-way system is predicted to increase traffic flow by some 25% along sections of the road and coupled, with possible decrease in speed limit may impact negatively on air quality.</p> <p>In 2014/15, the NLTF:</p> <ul style="list-style-type: none"> <li>Supported a sub-regional cycling officer group and completed mapping of proposed new routes and potentially cyclable trips.</li> <li>With London Cambridge Stansted Consortium partners successfully delivered a campaign to raise the profile of the West Anglia Route which directly contributed to the Secretary of State for Transport creating a West Anglia Rail Taskforce.</li> <li>Made the case for further investment in the development of the Crossrail 2 Regional Option as well as supporting an extension to New Southgate and further work to look at a future eastern extension.</li> <li>Closely engaged with Network Rail as they developed the Draft Anglia Route Study and, working with the GLA and other key partners, made a case for additional investment to be considered for the West Anglia Route.</li> <li>Made a strong case to the DfT for devolution of inner suburban rail services to TfL and, following the announcement of the devolution of some West Anglia services, engaged with TfL and LOROL to work through the practicalities.</li> <li>Developed and agreed north London priorities for the specification for next West Anglia rail franchise.</li> <li>Made the case for the Central Line to be an early priority for major upgrades as part of the New Tube for London programme.</li> <li>Provided a forum for updates and discussions on the work of the Roads Task Force as well as providing input into areas of work including identifying priorities schemes and locations.</li> <li>The North London Transport Forum officer group continues to meet bi-monthly with good attendance across the invited boroughs. As well as regular updates on ongoing areas of work there were also presentations on innovative approaches (for example the Future Cities Catapult) and best practice (such as West London's approach to monitoring travel planning arising from developments).</li> </ul> <p><b>Identifying Priorities</b></p> <p>For 2014/15 the partnership has identified a number of priorities:</p> <ul style="list-style-type: none"> <li>Supporting Londoners to cycle.</li> <li>Securing additional further investment for the rail network, particularly for larger, longer term schemes.</li> <li>Identifying whether there are sub-regional areas of work arising from the Mayor's Accessibility Implementation Plan.</li> <li>Making the bus network in north London more effective.</li> <li>Engaging with the work of the Roads Task Force including identifying opportunities for effective interventions in north London.</li> <li>Addressing the barriers / gaps that prevent some local stations from being effective orbital / radial interchanges.</li> <li>Getting a better understanding the issues and opportunities relating to freight in north London.</li> <li>Opportunities for linking travel planning with development control.</li> <li>Ensuring that transport contributes to public health including by encouraging more people to walk.</li> </ul>

Measure 10	Determining the Impact of developments on Local Air Quality
<p><b>Progress</b></p>	<p>All major developments in Haringey, or developments which are likely to expose new residents to poor air quality or have an air quality impact, require air quality to be considered planning application stage. In 2014 air quality was a consideration at the planning application stage for 3 major proposed developments.</p> <p>Air quality continues to be a requirement for consideration on all major planning applications and is included on the council's planning application validation checklist.</p> <p>Major applications are defined as those which involve the creation of 10 or more residential units; residential development of on a site of 0.5 hectares or more; non-residential development on a site of at least 1 hectare; and the creation of change of use of 1000 square metres or more of gross floor space (not including housing).</p>
Measure 11	Car Free Developments
<p><b>Progress</b></p>	<p>Number of applications accompanied/requested Transport Assessments</p> <ul style="list-style-type: none"> <li>- 2011/12 = 6</li> <li>- 2012/13 = 5</li> <li>- 2013/14 = 6</li> <li>-2014/15 = 10</li> </ul> <p>Number of applications proposing/requesting development car-free</p> <ul style="list-style-type: none"> <li>-2011/12 = 18 (5 of these were withdrawn/refused)</li> <li>-2012/13 = 21 (2 of these were withdrawn/refused)</li> <li>- 2013/14 = 24 (11 of these were withdrawn/refused)</li> <li>-2014/15 = 32 (10 of these were withdrawn/refused)</li> </ul> <p>Number of applications accompanied/requested Travel Plan</p> <ul style="list-style-type: none"> <li>-2011/12 = 18 (3 of these were withdrawn/refused)</li> <li>-2012/13 = 17 (3 of these were withdrawn/refused)</li> <li>-2013/14 = 26 (4 of these were withdrawn/refused)</li> <li>-2014/15 = 25 (9 of these were withdrawn/refused)</li> </ul>
Measure 12	Control of Dust during demolition and construction phases
<p><b>Progress</b></p>	<p>All approved major and medium sized developments are required via a planning condition to submit a construction management plan and also to state dust control measures from demolition and construction sites. Larger sites are required to register with the Considerate Constructors Scheme.</p>



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<b>Measure 13</b>	<b>Biomass Boilers</b>
<b>Progress</b>	Control of emissions from biomass boilers through the planning system has not progressed. However for large developments with Energy plans/ statements; there has been a notable abandonment of biomass due to the air pollution impact of emissions. No biomass boilers were proposed in 2014.
<b>Measure 14</b>	<b>Tree Planting</b>
<b>Progress</b>	<p>A total of 856 new trees were planted during the 2010/11 and 2011/12 planting seasons of which 641 were street trees.</p> <p>During the 2012/13 planting season, 366 trees were planted, of which 262 were street trees. 1,212 new trees were planted between 2010 and 2013. 250 trees were planted during the 2013/14 planting season.</p> <p>A total of 658 new trees were planted during the 2014/15 planting seasons of which 485 were street trees.</p> <p>The Council has revised and updated its Tree Strategy 2014 - 2018, which was consulted on in 2013. The target is to plant at least 250 trees each year, ensuring that 50 more trees are planted than removed each year. In Haringey there are approximately 1700 TPO's in place.</p>
<b>Measure 15</b>	<b>Controlling emissions through climate change actions</b>
<b>Progress</b>	<p>The council continues to promote sustainable living measures for issues such as water, energy, food and travel. In addition to the Haringey 40:20; an ambitious target to reduce CO<sub>2</sub> emissions in the borough by 40% by 2020, the council has set a target to reduce CO<sub>2</sub> emissions from its buildings of 40% by 2015, 5 years ahead of the borough wide target.</p> <p>Each year Haringey council produces an annual carbon report which will provide a transparent year on year account of progress made to reduce carbon emissions from the Council's operations and the borough as a whole. The report can be downloaded at: <a href="http://harinet.haringey.gov.uk/index/environment_and_transport/going-green/reducing-co2-emissions.htm">http://harinet.haringey.gov.uk/index/environment_and_transport/going-green/reducing-co2-emissions.htm</a></p>
<b>Measure 16</b>	<b>Industrial Process Emissions</b>
<b>Progress</b>	<p>Haringey council continues to ensure that emissions to atmosphere from small industrial businesses are controlled and regulated in accordance with the Environmental Permitting (England and Wales) Regulations 2010.</p> <p>As at December 2014 there were 44 dry cleaners premises, 5 Part B premises and 16 petrol stations permitted to operate in the borough.</p>
<b>Measure 17</b>	<b>Smoke and Emissions from Bonfires</b>
<b>Progress</b>	The council continues enforce smoke emissions from bonfires. In 2011 there were 111 bonfire complaints received and in 2012, 78 bonfire complaints and in 2013 there were 100 bonfire complaints. In 2014, a total of 71 bonfire complaints were received.

<b>Measure 18</b>	<b>Air Pollution and Health</b>
<b>Progress</b>	<p>The air quality pages on the council website have recently been updated. Airtex, along with Walkit.com are promoted on these pages. The air quality team is establishing links with the new Public Health team. Air quality is a topic in the Public Health JSNA; it is updated each year and is available to download at:</p> <p><a href="http://www.haringey.gov.uk/index/social_care_and_health/health/jsna/jsna-wider-determinants/jsna-environment.htm">http://www.haringey.gov.uk/index/social_care_and_health/health/jsna/jsna-wider-determinants/jsna-environment.htm</a></p> <p>A leaflet has also been produced for the Public Health Officials in Haringey about air quality in Haringey.</p> <p>A link has been provided to the GLA's 'Breathe Better Together' website.</p>
<b>Measure 19</b>	<b>Air Pollution Information</b> <ul style="list-style-type: none"> <li>• <b>Air quality monitoring</b></li> <li>• <b>Dissemination of Information</b></li> <li>• <b>School Awareness Project</b></li> </ul>
<b>Progress</b>	<p>Haringey council continues to monitor the pollutants of concern across the borough. All analysers at the 2 continuous monitoring stations are affiliated to the AURN (defra's national network). 2 diffusion tubes have been relocated and expanded to include hotspot locations. There remain 13 diffusion tube sites in the borough, all are located at building facades where there is risk of exposure and possible exceedences of the Governments objective.</p> <p>In 2013 funding was awarded from the GLA Mayors Air Quality Grant fund for an Air Quality Apprentice to continue awareness raising of air pollution issues at schools in Haringey. The apprentice was appointed in May 2014 and to date has delivered Air Quality assemblies at 27 primary schools, engaging with a total of 6495 students, promoted air pollution at Smarter Travel and Public Health events, project managed installation of a green screen at a primary school, developed air pollution presentation materials, including 'Air Monsters; Nixy NOx, PM Brothers – Phil (PM10) and Mitchell (PM2.5) and Dixy CO<sub>2</sub>. A small amount of funding was also awarded for a green screen to a primary school in Tottenham Hale. This was installed with some funds remaining for additional air pollution promotional material for use by the apprentice.</p>





Nixy NOx



PM Brothers – Phil & Mitchell



Dixy CO<sub>2</sub>