Village Groups Forum

3 October 2017

LONDON BOROUGH OF RICHMOND UPON THAMES

Introduction to Village Planning

Councillor Pamela Fleming

LONDON BOROUGH OF RICHMOND UPON THAMES

Village Planning Phase 2

- Final analysis of Twickenham and Strawberry Hill Plans underway
- Old Deer Park Supplementary Planning Guidance to be produced later this year.

Village Planning Phase 3

- Commenced following Cabinet Report March 2017
- Pilot projects
- Village Planning Fund

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Village Planning Fund launched June 14th 2017

Table of funding

Village cluster	Amount available
Richmond, Richmond Hill, Kew	£802,681
Twickenham, St Margarets, East Twickenham, Whitton and Heathfield, Strawberry Hill	£77,801
Hampton, Hampton Wick, Hampton Hill and Teddington	£13,808
East Sheen, Mortlake and Barnes	£10,455
Ham and Petersham	£180,309

http://richmond.gov.uk/myrichmond/village_plans/village_planning_fund

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Where are we now?

- This is a pilot – the Council will be evaluating the process and making improvements for the next round which will be early 2018.

- Application period was 8 weeks – during this time Community Links officers supported groups to put together applications.

- Received 35 applications in total – ranging from disability access to buildings, landscaping, websites and equipment.

- An internal officer board has met and validated which projects meet the criteria and will go forwards to the next stage. 18 are proceeding to the next stage

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The next stage:
public consultation October 2nd – 27th

- It is a priority for the Council that we understand that level of public support for each of the projects which has been validated.

- Public support will be a decisive factor in the overall decision whether or not to fund the proposal. It is part of a process.

- Public support cannot be the only decisive factor

- Consultation will take place online and also in the community

- Once the period of consultation is complete a report will be compiled and the Cabinet Member for Community ,Business and Environment will make the final decision.

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Village Planning Fund

A final decision will be announced in mid-December

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Please show your support!

October 2nd – 27th

http://richmond.gov.uk/myrichmond/village_plans/village_planning_fund

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Village Groups Forum Presentation

Air Quality

Carol Lee, Senior Environmental Health Pollution Practitioner

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Air Quality

A new priority…

LONDON BOROUGH OF
RICHMOND UPON THAMES

merton

- Is Air Pollution really a problem in 2017?
- What do we do in the Air Quality Section?
- How can we try and improve Air Quality?
- What can you do?

Richmond in context

London Borough of Richmond upon Thames

Est. Population(2016): *196,000*

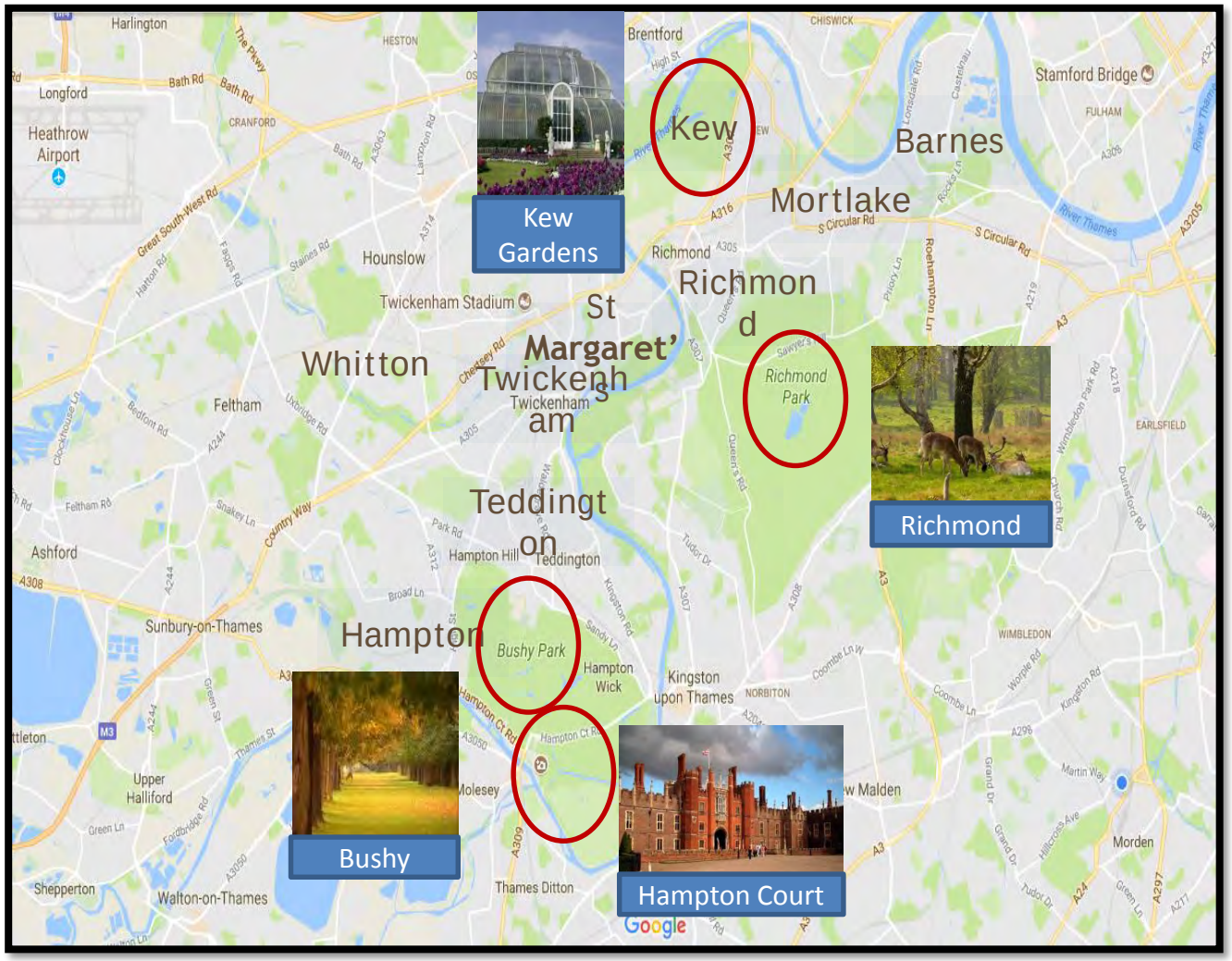
Area: *57.41km²*

Population Density: *3,135 /km²*

Over 100 parks and open spaces

34 km of river front

5x more green and open space than any other London Borough



Why has this become a priority now…

Increasing evidence to show the health impacts – public awareness

VW defeat device

Challenge by ClientEarth

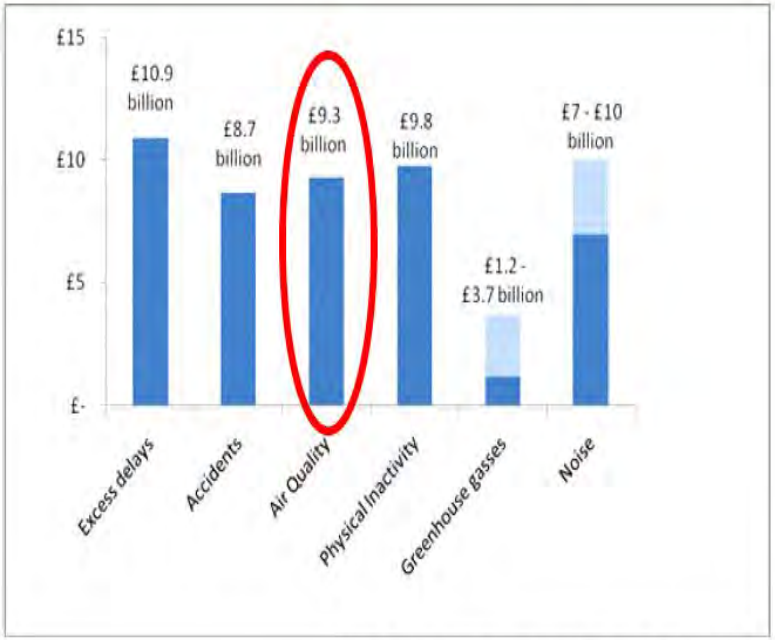
Visible Air Pollution
London Smog
December 1952

Is Air Pollution a problem in 2017?

- The Great Smog of London Friday 5th – Tuesday 9th December1952 resulted in 4,000 deaths shortly followed by 8,000 more.
- In 2010 the GLA estimated that 9,500 premature deaths in London were attributable to long term exposure to small particles.
- According to the Royal College of Physicians report published in 2016: “The annual mortality burden in the UK from exposure to outdoor air pollution is equivalent to around 40,000 deaths.”(approx. 29,000 attributed to PM and 11,000 attributed to NO2)
- Air pollution has an impact on everyone living and working in London. The most vulnerable are the young, the elderly and people with heart and/or respiratory conditions, such as asthma.

Department for Transport

The economic cost of air pollution



Source: Interdepartmental Group on Costs and Benefits, 2009

The economic cost

Sources of air pollution in London

- Road traffic - in particular, buses, lorries, black cabs and diesel vehicles
- Heating and cooling of buildings
- Wood/coal burning and bonfires
- Outside sources – a significant percentage of both NO_2 and PM_{10} pollution comes from outside London, as far afield as the Sahara
- Since 2002 levels of NO_2 have levelled off but have not significantly reduced

Pollutants of concern

- Nitrogen Dioxide (NO_2) –

  At very high levels, nitrogen dioxide gas irritates and inflames the airways of the lungs. This irritation causes a worsening of symptoms of those with lung or respiratory diseases. (NO_x is a generic term for the nitrogen oxides that are most relevant for air pollution, namely nitric oxides(NO) and nitrogen dioxide (NO_2).

- Ground Level Ozone (O_3) –

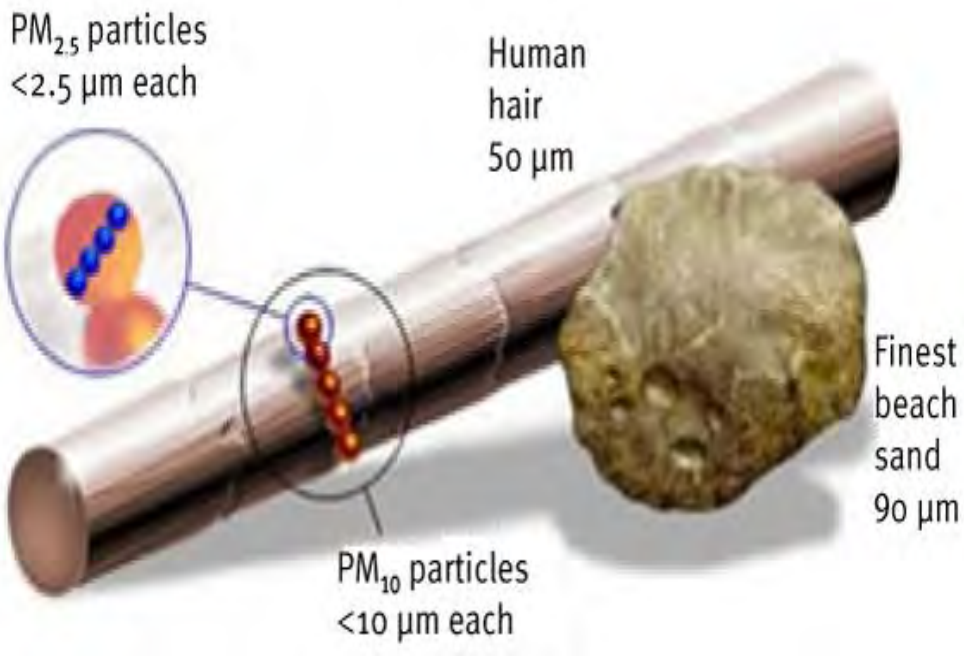
  Like nitrogen dioxide, high levels of ozone can irritate and inflame the lungs. It can also cause eye irritation, migraine and coughing.

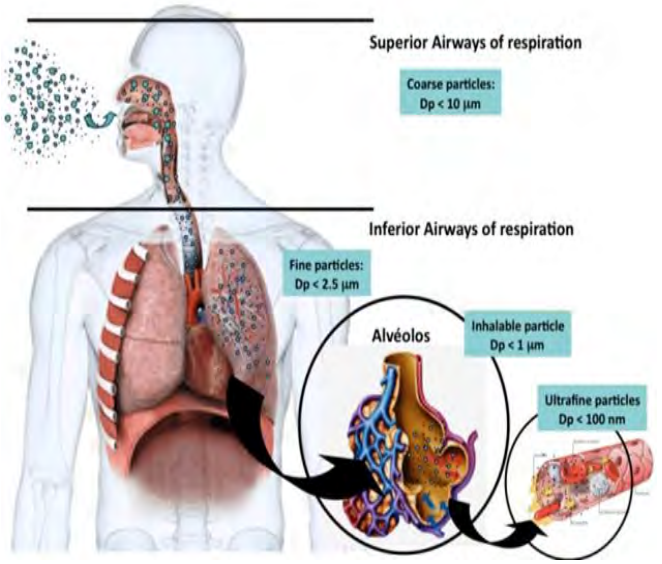
- Particulate Matter (PM) – PM_{10}, $PM_{2.5}$, PM_1, $PM_{0.01}$

  These fine particles can be breathed deeply into the lungs and are more likely to have a toxic effect than larger particles. Increasing concern now surrounds even finer particles. The many different sizes, shapes and chemical properties of particulate matter makes it very difficult to assess its health effects, with no known threshold concentration below which particulates have no effect on health.

PMs (Particulates)

Atmospheric *particulate* matter, also known as *particulate* matter (PM) or *particulates*, are microscopic solid or liquid matter suspended in the air we breathe





So, what has LBRuT done?

LONDON BOROUGH OF RICHMOND UPON THAMES

AIR QUALITY MANAGEMENT AREA ORDER

The London Borough of Richmond upon Thames, Civic Centre, 44 York Street, Twickenham, TW1 3BZ ('the Council') in exercise of the powers conferred on it by the Environment Act 1995 section 83 makes the following Order:

1. This Order may be cited as the London Borough of Richmond upon Thames Air Quality Management Area Order 2000 and will come into operation on the 31st day of December 2000.

2. The area that is edged red on the plan prepared and sealed with the common seal of the Council is declared to be the Air Quality Management Area ('the designated area'). The map is deposited at the offices of the Council. The extent of the Air Quality Management Area is the borough boundary.

3. The Air Quality Management Area is designated for the pollutants nitrogen dioxide and PM10 particulates.

Air Quality Monitoring Labs in LBRuT

3 labs:

Castelnau Library
Wetlands
Mobile

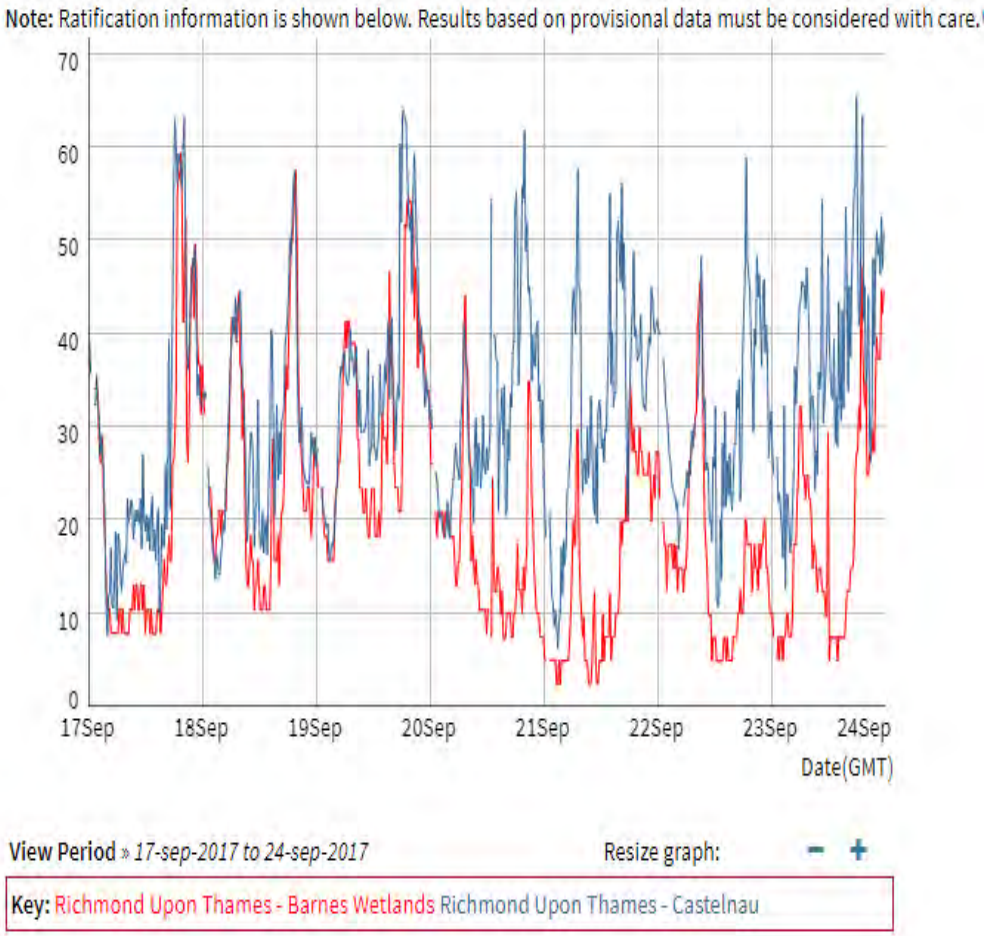
Continuous (automatic) –

High-resolution measurements for major pollutants

- Strict QA/QC quality procedures, purchase/operation expensive
- Direct comparison against ***ALL*** AQS objectives
- Results feed into AURN and LAQN.

Measurements of NO2 at Castelnau and Wetlands

EU limit value for NO_2 is 40 µg/m3

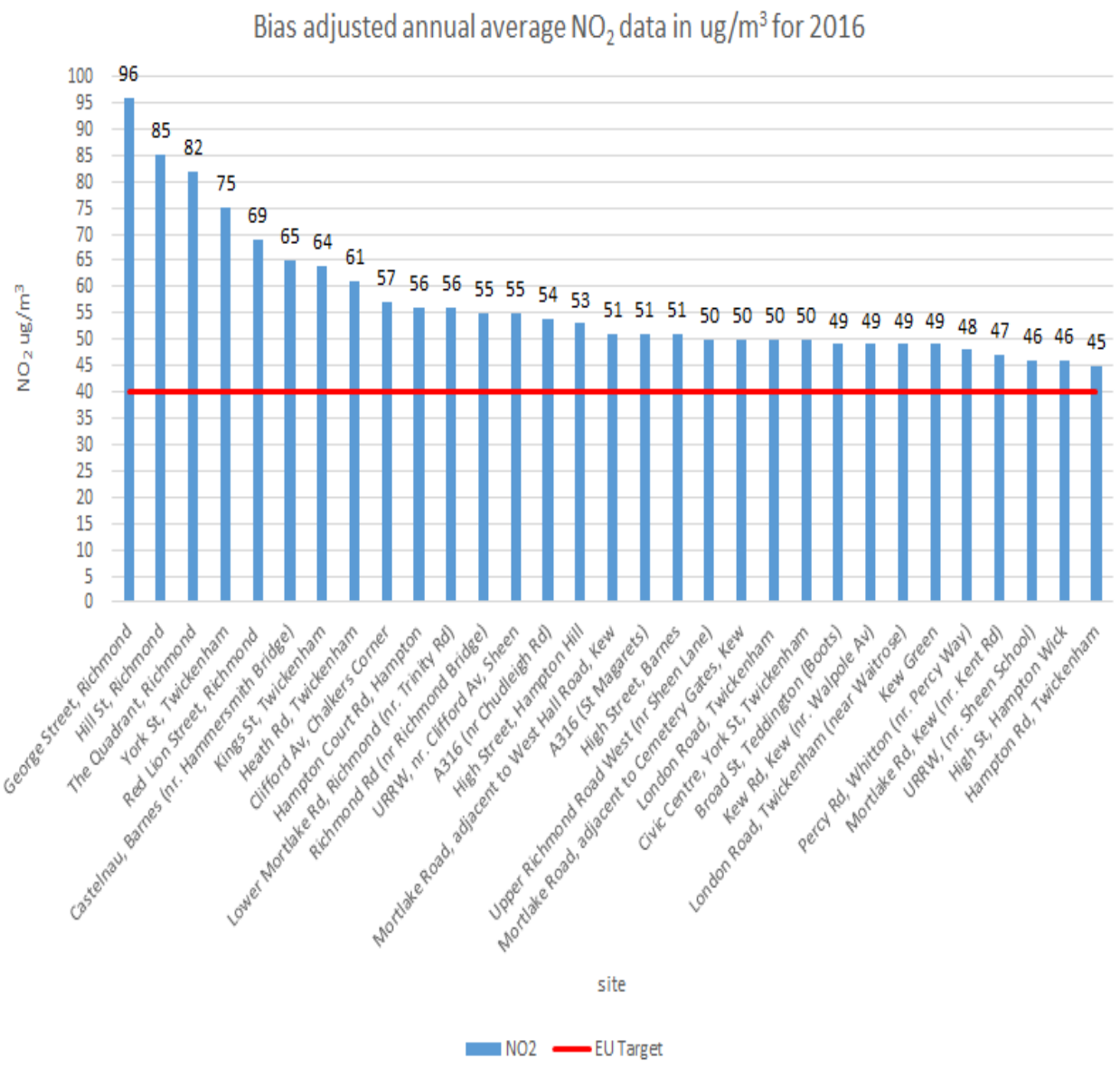


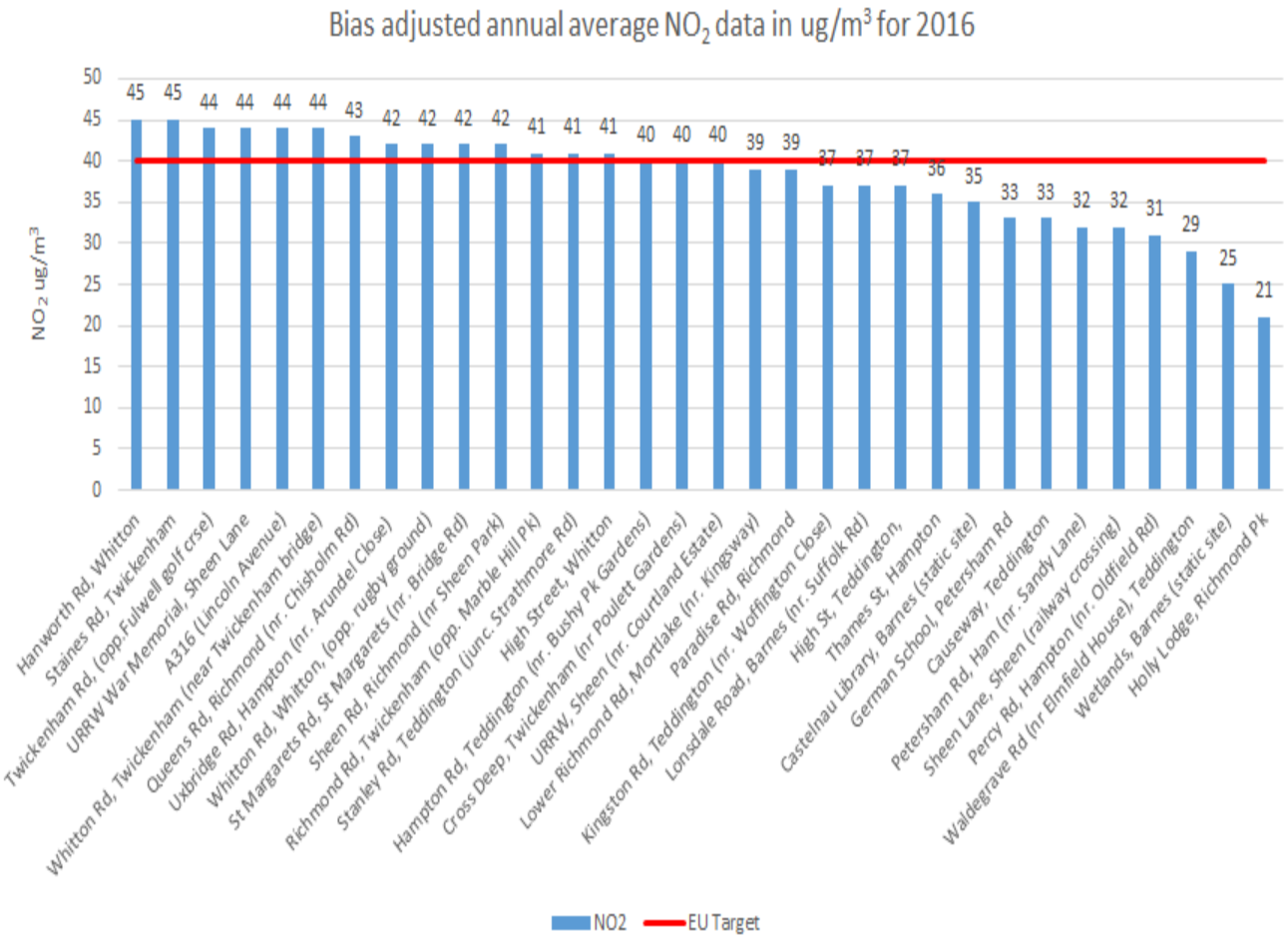
Diffusion tubes

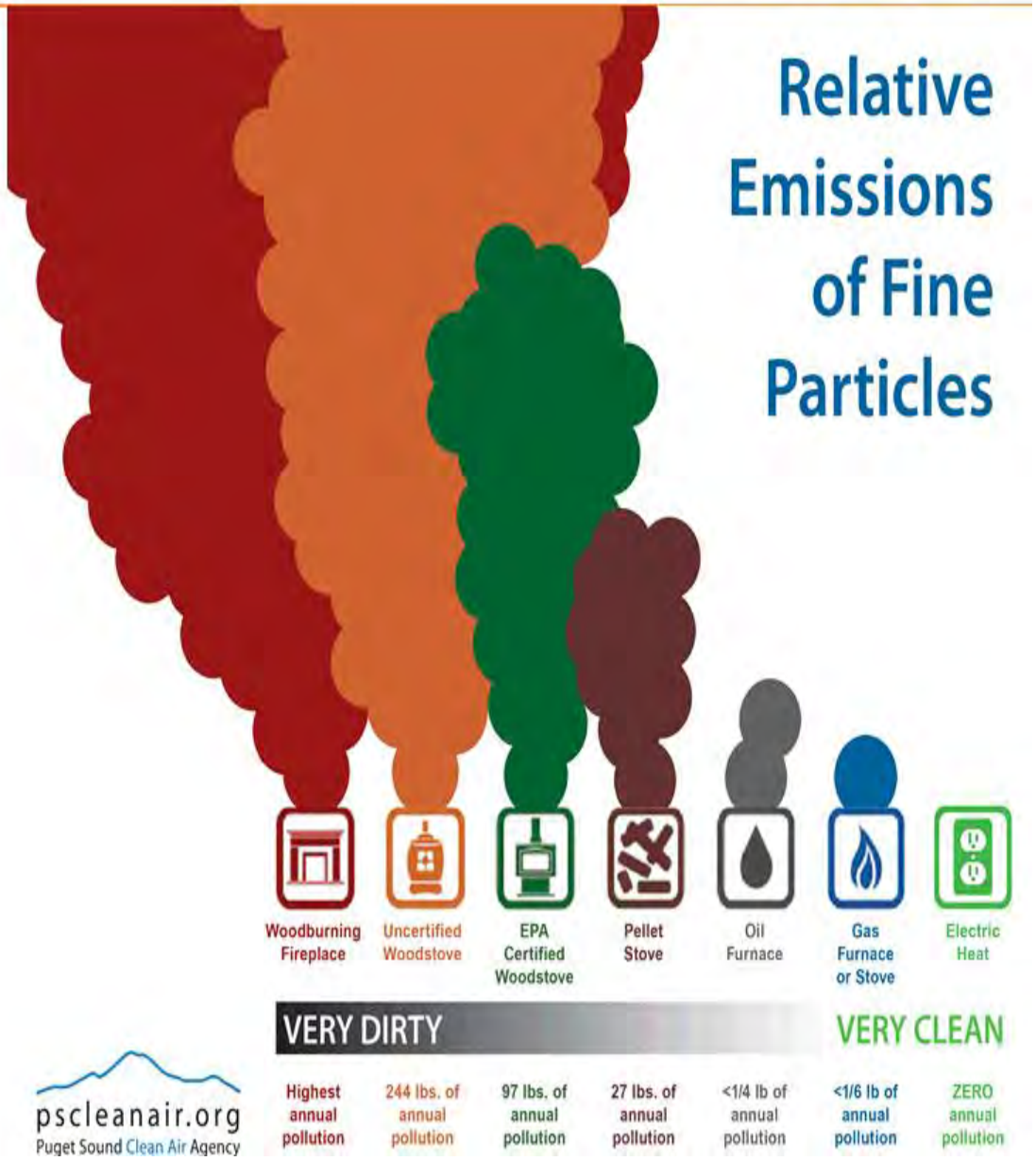
NO_2

- Simple and inexpensive method of screening
- Shows average pollution concentration over a period of weeks/months
- Indicative measure of compliance against *SOME* AQS objectives
- Network operated by each Local Authority
- Can be biased adjusted at end of year for greater accuracy.

See Location Table for site locations and measured concentrations. Objective limit = 40ug/m^3. Please note as per example above the numbers = the site location, not the NO_2 concentration. All data has been bias adjusted for greater accuracy and corrected for exposure to the nearest residential property. Site 53 is our mobile unit which was located at Hampton Court Road, Hampton Court in 2010.


Bias adjusted annual average NO2 data in ug/m3 for 2016
NO2 ug/m3
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
96
85
82
75
69
65
64
61
57
56
56
55
55
54
53
51
51
51
50
50
50
50
49
49
49
49
48
47
46
46
45
George Street, Richmond
Hill St, Richmond
The Quadrant, Richmond
York St, Twickenham
Red Lion Street, Richmond
Castelnau, Barnes (nr. Hammersmith Bridge)
Kings St, Twickenham
Heath Rd, Twickenham
Clifford Av, Chalkers Corner
Hampton Court Rd, Hampton
Lower Mortlake Rd, Richmond (nr. Trinity Rd)
Richmond Rd (nr Richmond Bridge)
URRW, nr. Clifford Av, Sheen
A316 (nr Chudleigh Rd)
High Street, Hampton Hill
Mortlake Road, adjacent to West Hall Road, Kew
A316 (St Magarets)
High Street, Barnes
Upper Richmond Road West (nr Sheen Lane)
Mortlake Road, adjacent to Cemetery Gates, Kew
London Road, Twickenham
Civic Centre, York St, Twickenham
Broad St, Teddington (Boots)
Kew Rd, Kew (nr. Walpole Av)
London Road, Twickenham (near Waitrose)
Kew Green
Percy Rd, Whitton (nr. Percy Way)
Mortlake Rd, Kew (nr. Kent Rd)
URRW, (nr. Sheen School)
High St, Hampton Wick
Hampton Rd, Twickenham
site
NO2
EU Target


Bias adjusted annual average NO2 data in ug/m3 for 2016
NO2 ug/m3
50
45
40
35
30
25
20
15
10
5
0
45 45 44 44 44 44 43 42 42 42 42 41 41 41 40 40 40 39 39 37 37 37 36 35 33 33 32 32 31 29 25 21
Hanworth Rd, Whitton
Staines Rd, Twickenham
Twickenham Rd, (opp.Fulwell golf crse)
URRW War Memorial, Sheen Lane
A316 (Lincoln Avenue)
Whitton Rd, Twickenham (near Twickenham bridge)
Queens Rd, Richmond (nr. Chisholm Rd)
Uxbridge Rd, Hampton (nr. Arundel Close)
Whitton Rd, Whitton, (opp. rugby ground)
St Margarets Rd, St Margarets (nr. Bridge Rd)
Sheen Rd, Richmond (nr Sheen Park)
Richmond Rd, Twickenham (opp. Marble Hill Pk)
Stanley Rd, Teddington (junc. Strathmore Rd)
High Street, Whitton
Hampton Rd, Teddington (nr. Bushy Pk Gardens)
Cross Deep, Twickenham (nr Poulett Gardens)
URRW, Sheen (nr. Courtland Estate)
Lower Richmond Rd, Mortlake (nr. Kingsway)
Paradise Rd, Richmond
Kingston Rd, Teddington (nr. Woffington Close)
Lonsdale Road, Barnes (nr. Suffolk Rd)
High St, Teddington,
Thames St, Hampton
Castelnau Library, Barnes (static site)
German School, Petersham Rd
Causeway, Teddington
Petersham Rd, Ham (nr. Sandy Lane)
Sheen Lane, Sheen (railway crossing)
Percy Rd, Hampton (nr. Oldfield Rd)
Waldegrave Rd (nr Elmfield House), Teddington
Wetlands, Barnes (static site)
Holly Lodge, Richmond Pk
NO2
EU Target


Relative Emissions of Fine Particles
Woodburning Fireplace
Uncertified Woodstove
EPA Certified Woodstove
Pellet Stove
Oil Furnace
Gas Furnace or Stove
Electric Heat
VERY DIRTY
VERY CLEAN
Highest annual pollution
244 lbs. of annual pollution
97 lbs. of annual pollution
27 lbs. of annual pollution
<1/4 lb of annual pollution
<1/6 lb of annual pollution
ZERO annual pollution
pscleanair.org
Puget Sound Clean Air Agency

POLLUTANTS THAT AFFECT AIR QUALITY

Particulate Matter ($PM_{2.5}$)

SOURCES

*percentage of total $PM_{2.5}$ emissions (2015) source: NAEI 2017

Domestic wood & coal burning — 39%*

Industrial combustion — 17%*

Road transport — 13%*

Industrial processes — 10%*

IMPACTS

These tiny particles from smoke, soot and dust can get into the...

lungs and blood

PM can be transported around the body and get lodged in organs

More likely to be affected are:

those already suffering from lung and heart conditions

the elderly

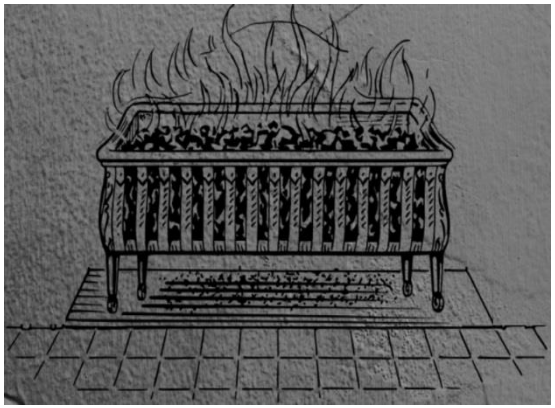
and very young

LIFESPAN

$PM_{2.5}$ can **shorten** lifespans

Is your fire or wood burning stove polluting our borough?

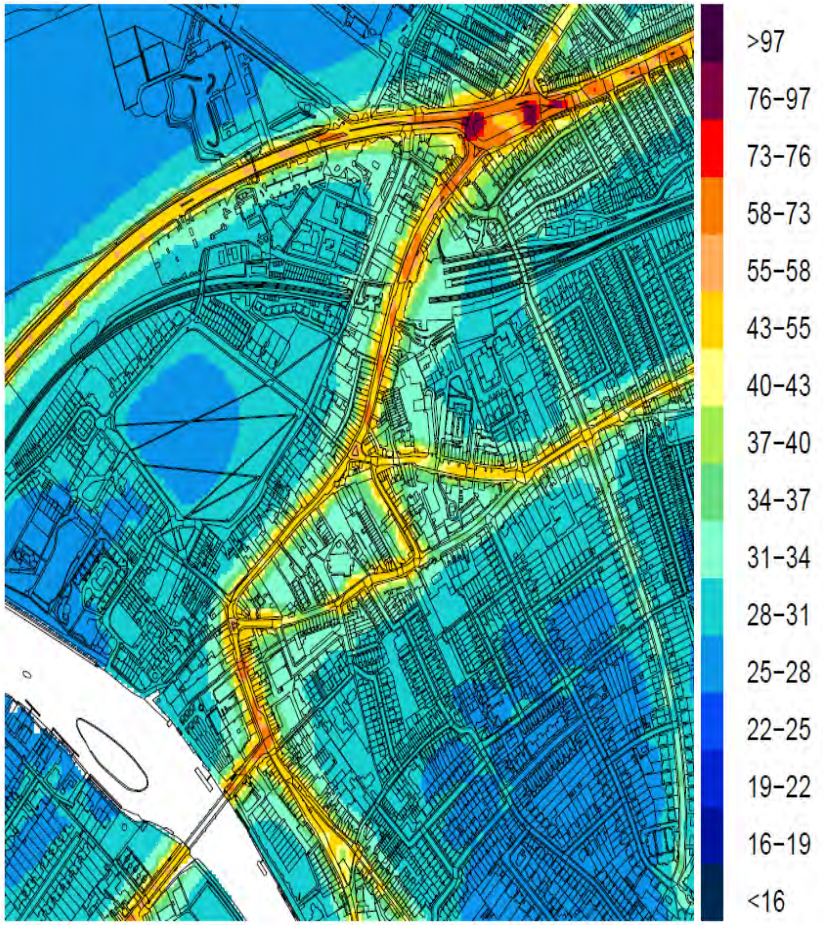
Did you know Richmond upon Thames is designated as a **smoke control area?**

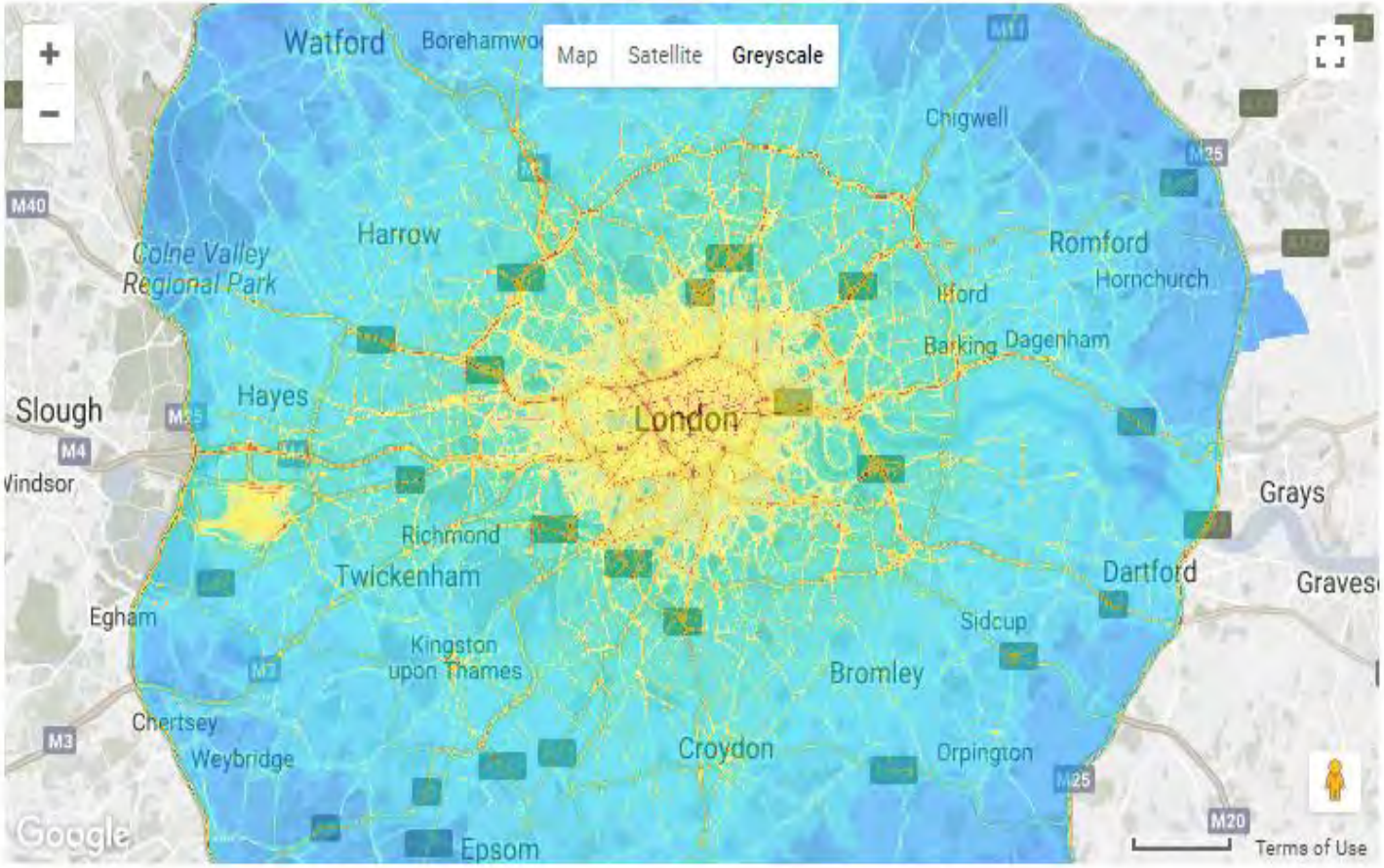


You will be committing an offence if you emit smoke from a chimney of a building, from a furnace or from any fixed boiler, unless you are burning an authorised fuel and/or using an exempt appliance.

https://www.richmond.gov.uk/smoke_control_areas

Map showing modelled NO_2 pollution concentrations for 2020 for Richmond town centre - ERG, King's College London, Aug 2017





Modelled annual mean NO2 air pollution, based on measurements made during *2013*.

This map was used with permission from The Greater London Authority and Transport for London, who fund, develop and maintain the London Atmospheric Emissions Inventory. For more information please visit data.london.gov.uk

Key: Annual mean NO2 air pollution for 2013, in microgrammes per metre cubed (ug/m3)

<16 16 19 22 25 28 31 34 37 40 43 46 49 52 55 58 61 64 67 70 73 76 79 82 85 88 91 94 >97

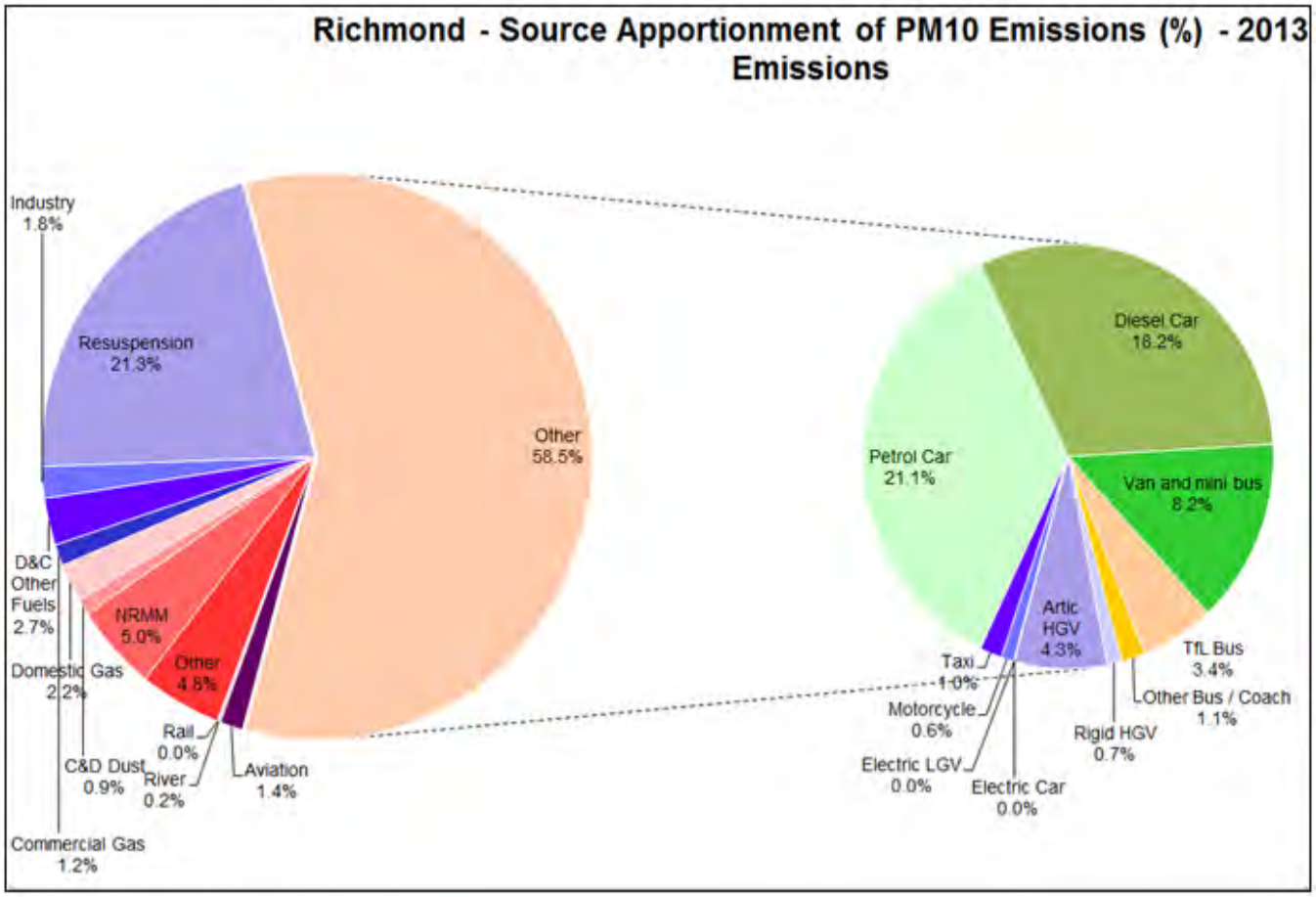
Passes annual mean objective

Fails annual mean objective

Sources of Particulates

PMs come from…

- Motor vehicles
- Wood burning stoves and fireplaces
- Dust from construction/demolition
- Bonfires
- Waste burning
- Industrial sources
- Windblown dust

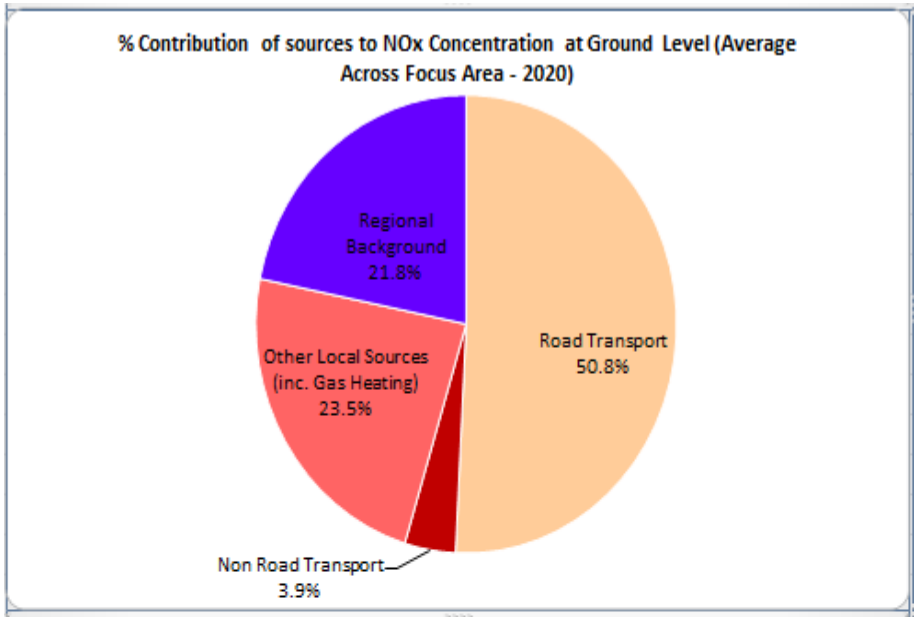


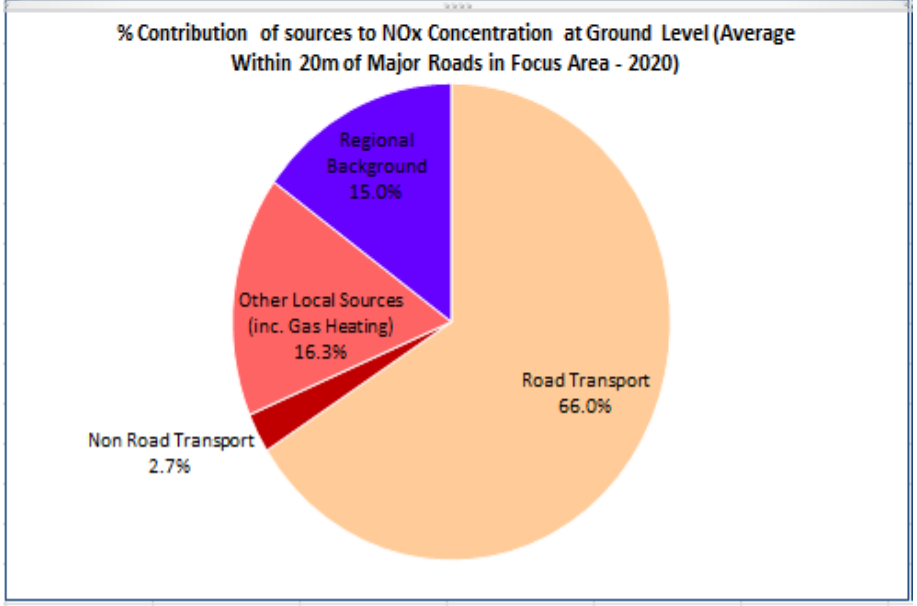
Sources of NO_x

Aside from some natural occurrences this is almost always linked to burning fuels.

Twickenham town centre

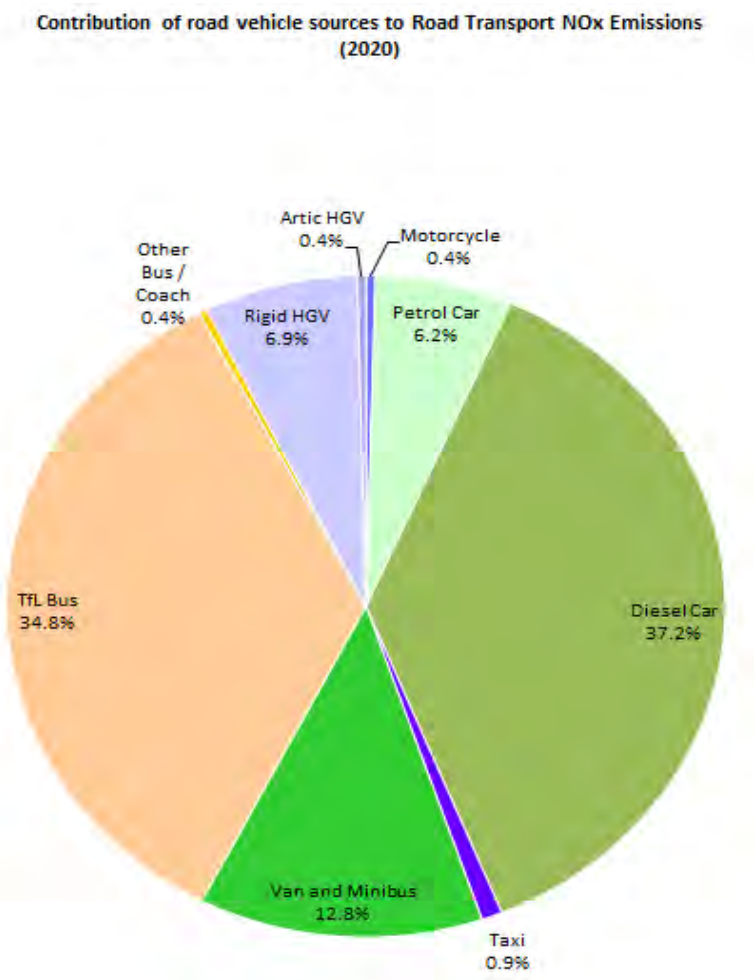
(source: GLA)





The contribution of diesel to NO_x emissions in Twickenham Town Centre

In June 2012 the International Agency for Research on Cancer (IARC) confirmed that **fumes from diesel engines are carcinogenic**. Their research determines, for the first time, that exposure can cause lung cancer and possibly tumours to the bladder.



Measures to improve air quality

- **European Measures** – EU directives – govern various aspects of pollution including euro standards for cars – currently euro VI
- **National Measures** – the Air Quality Strategy for England, Scotland, Wales and Northern Ireland published by the UK Government in July 2007, revised in 2011 – set out standards and objectives to achieve. It is not a legal requirement to achieve the National Air Quality Objectives but Richmond is obliged to do all it can to meet these standards
- **London Wide Measures** – Sadiq Khan has prioritised Air Quality and is speeding up the renewal of the bus fleet, requiring all new licensed black cabs to be ZEC – zero emission capable from Jan 2018, tightening up the LEZ, exploring options for the ULEZ, introducing the T charge on 23rd October 2017 and tightening many aspects of the planning system.
- **Local Measures** – EH is encouraging joint working with other departments within the Council, including public health. LBRUT is working on many measures to reduce pollution throughout the borough, to educate and inform and to try and encourage more sustainable modes of transport for all. Please see our **Air Quality Action Plan 2017-2022** which is out for public consultation until **Monday 30th October 2017.** We welcome feedback https://consultation.richmond.gov.uk/environment/aqap-2017/

What is LBRuT doing to try and improve air quality?

- Maintaining a robust monitoring regime
- Publishing our Air Quality Action Plan 2017-2022 for public consultation, to be followed by an SPD for planning. Feedback welcome! https://consultation.richmond.gov.uk/environment/aqap-2017/
- Working with schools - to educate and inform via a cleanair4schoolsprogramme, supporting the Mayor's AQ audits
- Working on improvements to High Streets for pedestrians,
- Supporting cycle infrastructure, public transport and the installation of more electric vehicle (EV) charge points;
- Promoting school travel plans and healthy travel for all staff;
- working on new procedures for all planning applications;
- Richmond and Merton are leading on the NRMM project (non road mobile machinery) – to reduce emissions from major building sites.
- considering the adoption of policies such as no engine idling, restricting bonfires, planting more green screens, considering revising licenses for mobile food/ice cream vans plus much more and raising awareness through targeted campaigns.

Work with schools

Schools Audit

- Schools in high pollution areas were identified
- Monitoring was carried out within the schools and on children's walking routes
- Measurements of NO_x, $PM_{2.5}$, PM_{10}, and CO_2

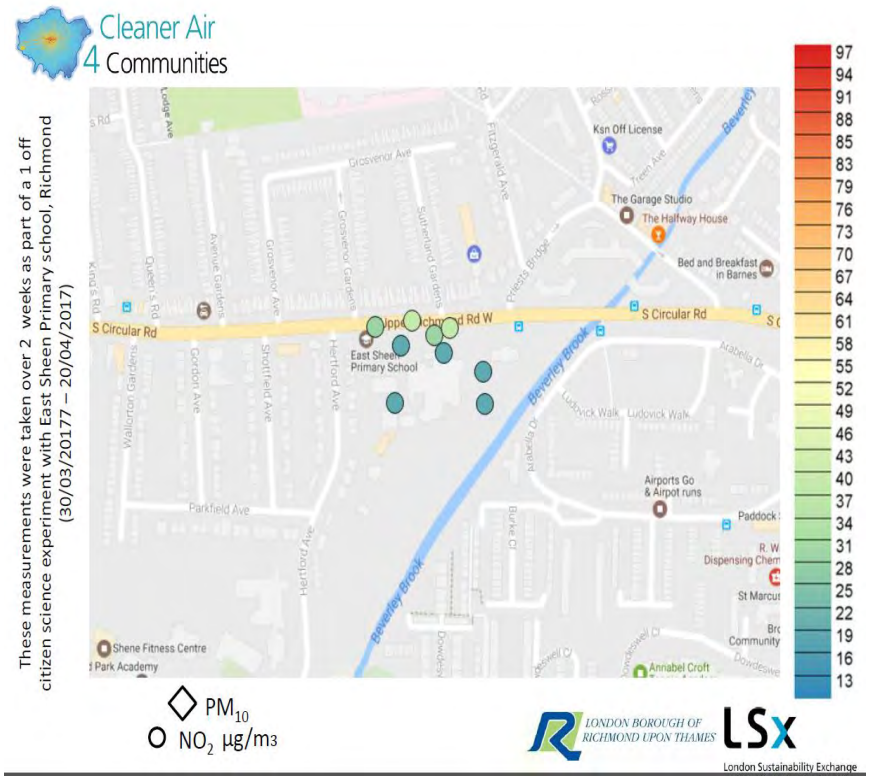
CO_2 and PM Monitors

Diffusion Tubes

July - August

19	100	100	64.52	59.10	47.24	44.20	37.64	43.72	46.23	39.73	49.63	45.55	52.05	66.03	**50**	**49**
20	100	100	58.74	55.85	40.49	39.81	44.49	38.95	44.53	42.62	51.46	39.31	53.73	67.17	**48**	**47**
21	100	92	40.94	43.15	36.37	34.16	41.26	35.38	30.53	30.75		43.32	51.03	53.25	**40**	**39**
22	100	100	71.19	53.22	47.14	51.72	55.48	61.28	77.40	61.80	89.47	60.69	80.89	82.86	**66**	**65**
23	100	100	41.32	41.87	36.87	33.84	35.38	34.19	23.40	26.68	36.60	35.66	40.79	50.52	36	35
24	100	100	43.27	41.93	32.36	33.70	37.24	34.80	[illegible]	[illegible]	31.92	44.71	41.98	53.56	38	37
25	100	100	47.95	51.28	42.01	42.14	47.67	46.40	40.60	40.11	43.74	52.73	46.60	56.31	**46**	**46**
26	100	92	42.26		41.23	37.14	39.50	35.01	37.16	33.22	40.80	41.73	49.52	56.87	**41**	**40**
27	100	100	39.66	36.01	36.13	44.76	46.02	43.19	39.17	32.94	41.20	46.48	63.16	59.35	**44**	**43**
28	100	100	21.47	24.12	18.64	15.66	17.63	17.00	12.17	13.81	17.14	21.74	27.14	31.13	20	21
29	100	100	35.91	34.44	31.18	26.17	32.67	30.71	25.26	21.24	28.94	37.90	42.26	45.88	33	32
30	100	92	31.33	35.67	35.42	27.04	33.75	28.80	19.52		28.30	38.21	43.52	47.94	34	33
31	100	100	66.31	58.86	50.62	49.82	52.56	49.03	45.32	43.92	59.81	50.10	58.13	75.30	**55**	**54**
32	100	100	69.69	72.42	62.76	34.31	71.95	68.09	57.67	61.11	70.08	64.84	73.44	82.21	**66**	**64**
33	100	100	58.07	70.42	62.18	62.70	61.80	61.50	49.91	51.73	56.61	68.79	72.88	66.44	**62**	**61**
34	100	100	37.03	43.38	38.29	33.30	32.77	32.32	29.51	31.30	30.96	37.43	46.39	50.70	37	36
35	100	100	51.46	55.62	40.33	40.15	45.74	38.16	42.15	40.42	53.78	40.66	48.62	60.10	**46**	**46**
36	100	92	47.17	51.79	51.63	37.18	58.79		38.75	41.42	48.89	57.65	62.32	63.92	**51**	**50**
37	100	100	26.54	26.15	21.86	19.18	22.53	19.68	36.87	16.37	20.38	25.71	30.25	34.40	23	25
39	100	100	53.78	59.11	53.82	52.55	54.14	51.32	55.70	55.04	59.24	58.95	59.59	65.87	**57**	**55**
40	100	92	46.40	47.07	38.99	44.83	44.18	41.72	43.94	40.07		48.32	51.57	56.07	**46**	**45**
41	100	100	43.20	45.33	37.03	32.53	38.20	37.47	34.20	32.62	38.82	38.96	45.33	51.51	**40**	39
42	100	100	43.11	53.82	47.55	79.89	99.38	90.96	106.90	100.95	112.78	80.65	93.03	99.05	**84**	**82**
43	100	100	91.93	87.59	70.88	84.81	89.97	73.13	97.10	76.64	95.13	77.07	84.53	106.41	**86**	**85**
44	100	100	45.41	47.13	40.44	35.04	42.07	35.14	36.10	35.62	42.42	44.04	54.87	55.19	**43**	**42**
45	100	100	39.97	40.81	33.46	35.08	35.34	32.16	35.46	30.05	40.82	36.27	44.41	53.77	38	37

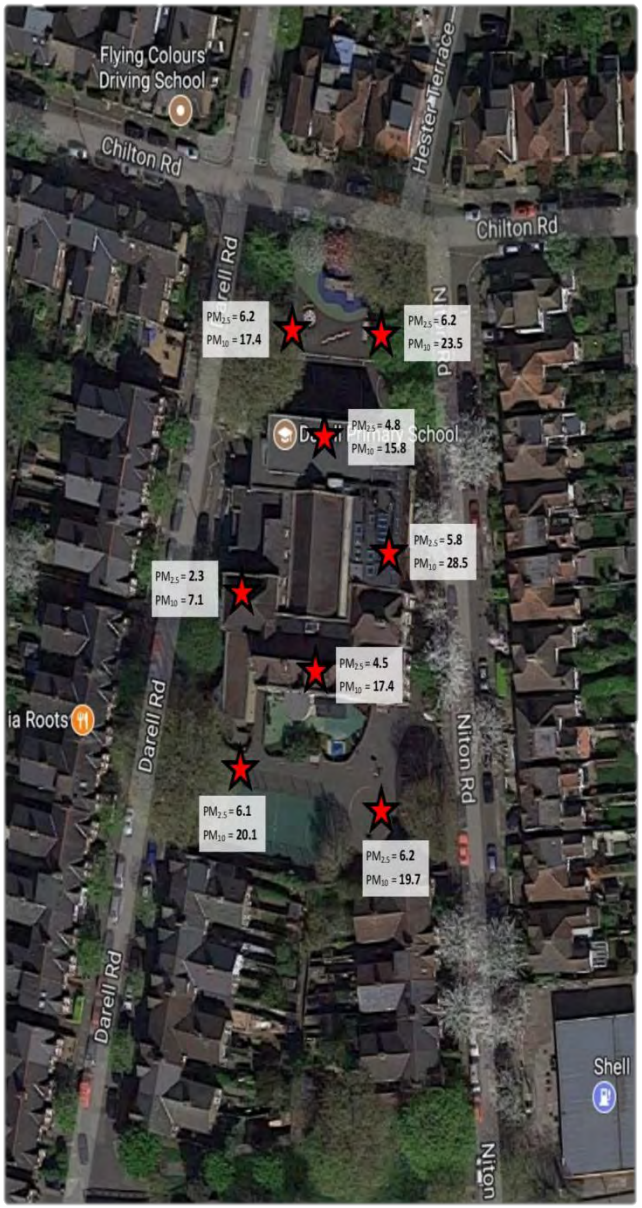
Initial Results



Legal Limit:

$PM_{2.5}$ = 25 µg/m3 (over 1yr)

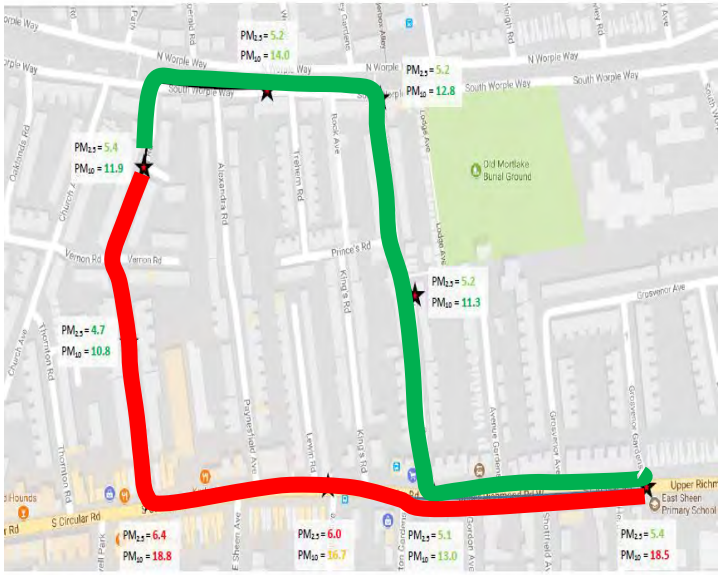
PM_{10} = 40 µg/m3 (over 1 yr)
50 µg/m3 (over 24h)



Outcomes

Action

Education



Preferred routes

What can you do? Remember…. Source – Path – Receiver

Source is the cause of Pollution, so reduce polluting vehicles, increase

walking, cycling and sustainable transport, consider electric vehicles, install

ultra low NOx boilers and recycle or compost rather than burn.

Path is the way the Pollution arrives at the receiver, so restrict the pathway

by keeping your distance from the source, blocking the path by screening

and utilise abatement technology

Receiver is the affected person , so avoid pollution , take preventative

medication, design to consider the receiver, modify the building.

We **WILL** tackle this problem

We have in the past…

We need a concerted effort….

This will be an uphill struggle due to an increasing population, social changes, and predicted congestion.

We are not anti car – we are pro sensible use of the car

To conclude…

- Think before you switch on your heating or jump in your car – is there a better alternative?
- Recycle or compost – don't burn and use wood burners with discretion.
- Adopt a more sustainable and active lifestyle for you and your family
- Reduce your own exposure and that of your family – walk one road back and find alternative routes with http://walkit.com/
- If you suffer from any respiratory or heart problem, especially if you are young or elderly, please register for free pollution alerts with airText http://www.airtext.info/
- Please complete our air quality action plan consultation https://consultation.richmond.gov.uk/environment/aqap-2017/

Remember this is a call for action from each and everyone of us. We all need to think about the way we live our lives and move around the planet. Increased personal car use will not be sustainable. The solution for a more active, healthy life style with resultant lower levels of pollution is in our own hands.

Thank You

Village Groups Forum

Activities, Needs and Assets exercise

Village Groups Forum

Networking