

## How to grow London



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- London's growth – how big and how fast?
- Does size matter?
- Key implications – for sustainable development, housing and the environment
- Things to watch out for
- Mayor and Assembly

## The Mayor of London

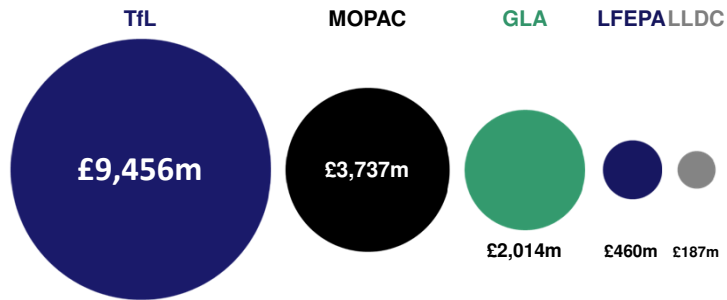


## The Mayor of London

- A directly elected Mayor with executive powers
- Largest personal mandate of any UK politician
- Principal roles set down in the GLA Act:
  - Promote economic development and wealth creation
  - Promote social development
  - Promote the improvement of the environment
- Seven statutory strategies – including the London Plan

## The GLA group's budget

### Expenditure by GLA body

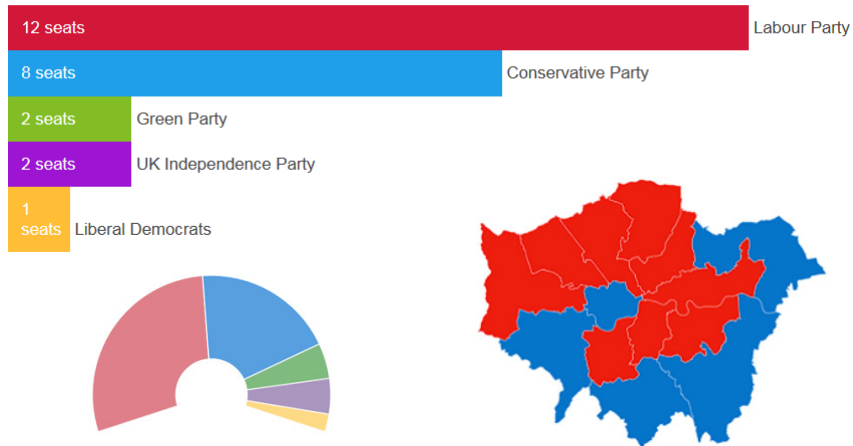


## The London Assembly

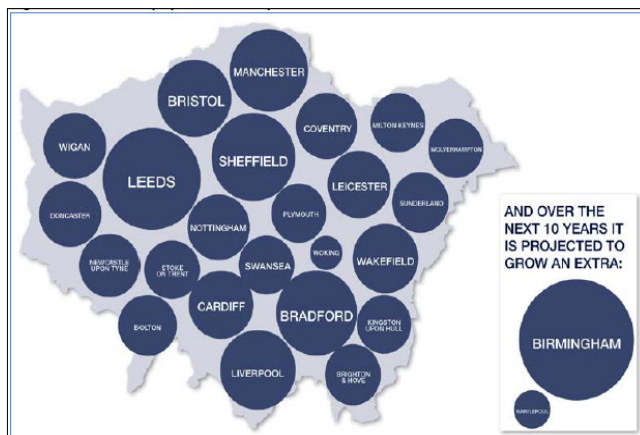


## London Assembly 2016

London Assembly seats (25 in total)

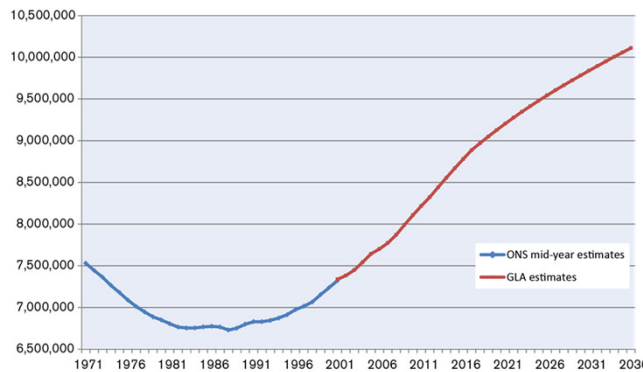


## London's growth - how big and how fast?



London is already the same size as 24 of the country's biggest cities combined

## London's growth – will be big and fast



ONS estimates are even higher...

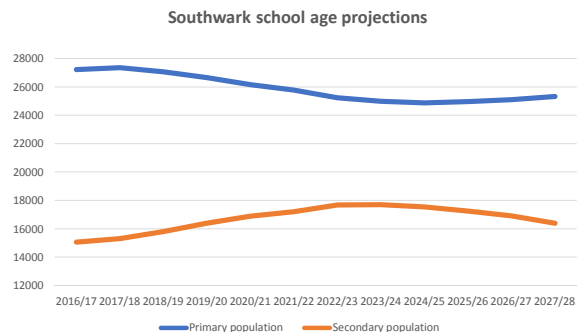
- 2014 – 8.5 million
- 2018 – 9.1 million
- 2020 – 9.3 million
- 2025 – 9.8 million
- 2030 – 10.2 million
- 2035 – 10.7 million

Source: Office for National Statistics mid-year estimates to 2001, GLA estimates 2002 to 2036

## Southwark's growth

- Southwark population 306,745 - estimated to increase by 47,018 over the next 10 years
- Represents a 15% increase, compared to a 10% increase in London
- The 65+ age group is predicted to grow, the fastest (32%) and the 20-39 group the slowest (9%)

Has Southwark reached 'peak primary'?



## Does size matter?



Not if it's managed sustainably - with adequate supporting infrastructure

## Cities can be densely populated without being overpopulated

### **The dysfunctional megacity: why Dhaka is bursting at the sewers**

Cities can be dense without being overpopulated. But in the world's most crowded city, the drains can't cope - creating a grim new job



Overpopulation - having more people in one place that can live there comfortably, or more than the resources available can cater for.

Singapore, a small island, has a high population density – about 10,200 per sq km – but few people would call it overpopulated.

## By 2050 London will need...

- 1.5 million new homes
- More than 800,000 new jobs
- 600 more schools and colleges
- 50% increase in public transport capacity
- 20% increase in energy capacity
- £1 billion investment in extra healthcare
- 9000 hectares of accessible green space
- 40 new recycling facilities

Arup was enlisted to provide an assessment of the costs associated with London's long-term growth...

**Arup calculated that the cost would exceed £1.3 trillion**

**All London Mayors have had their red lines in terms of managing growth**



## Managing growth – Mayoral policy choices

### Current London Plan Policy 1.1

A) Growth and change in London will be managed in order to realise the Mayor's vision for London's sustainable development.

B) Growth will be supported and managed across all parts of London to **ensure it takes place within the current boundaries of Greater London** without:

- encroaching on the Green Belt, or on London's protected open spaces
- having unacceptable impacts on the environment

## New Mayoral policy

**Continues the overall 'compact city' approach but with 'a twist'**

### Policy Good Growth 2: Making the best use of land

To create **high-density, mixed-use places** that make the best use of land, those involved in planning and development must...

Proactively explore the potential to intensify the use of land...  
**promoting higher density development...**

Protect London's open spaces, including the **Green Belt, Metropolitan Open Land**... and promote the creation of new green infrastructure and urban greening.



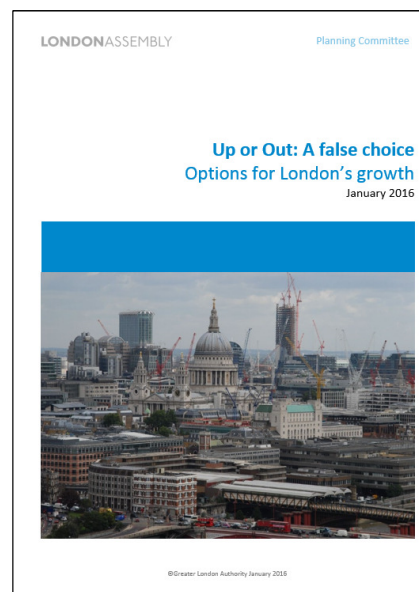
## What does this approach mean for managing London's growth?

- Increases in density
- Housing delivery
- Co-location and mixed use development
- Protecting open space and promoting 'urban greening'
- Shifting transport patterns and improving air quality

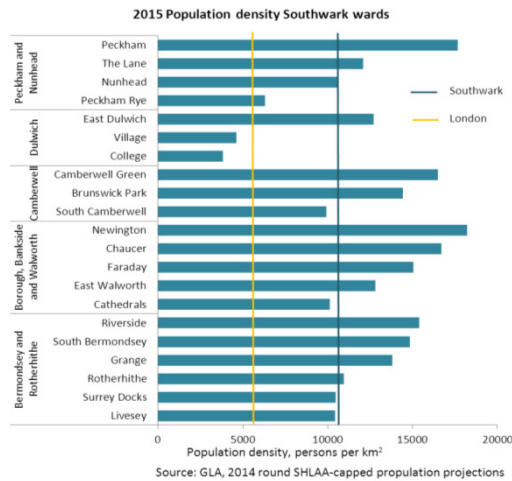
## Increasing density

Continuing the 'compact city' approach means that...

By 2041, population density will reach levels that cities like Rio, Osaka and Bangkok experience today, or double the density levels of cities like Paris, Rome and Berlin



## Southwark has high population density - already



Southwark is the 9th most densely populated in England & Wales

Southwark more than twice as densely populated as London

Newington is the most densely populated ward – nearly 3 times higher than London average

10,632 persons / Sq. Km compared to Singapore 10,200

## More to come?

This?



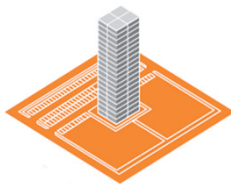
Or this?



## Density does not have to mean high rise



Family homes can be provided with private gardens at street and roof level providing a mix of housing types and sizes on one site



But it must be well designed with good space standards and offer facilities for families...



## Delivering new housing will be vital

The Mayor has identified need for 66,000 additional homes a year and there are sites available to accommodate 64,500 new homes a year.

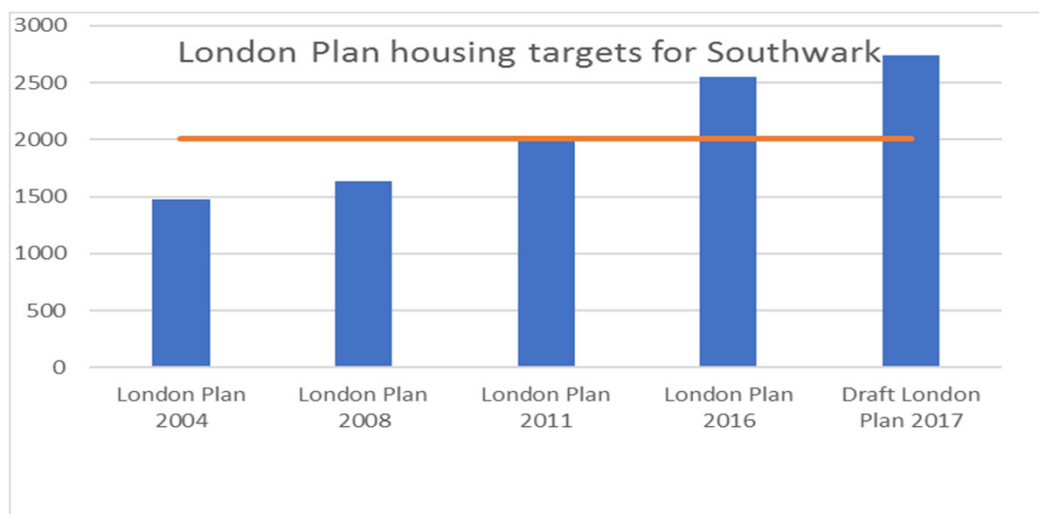
But the key factor is delivering new homes. And the record is not good.

But is this improving?

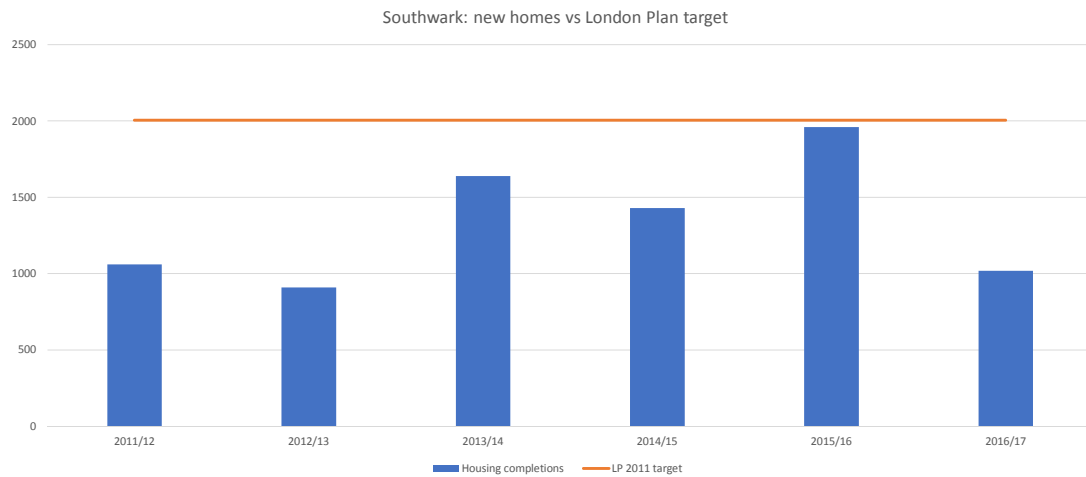
In 2016-17, London supplied 39,560 net additional homes. This was a 30 per cent increase over the previous year, when 30,390 homes were supplied.

## How is it looking for Southwark?

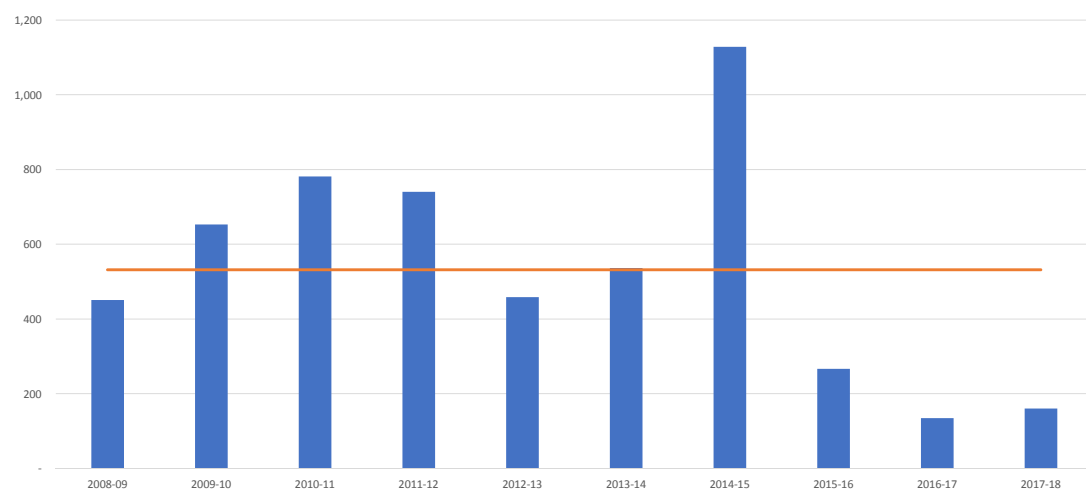
### Southwark's housing targets are increasing



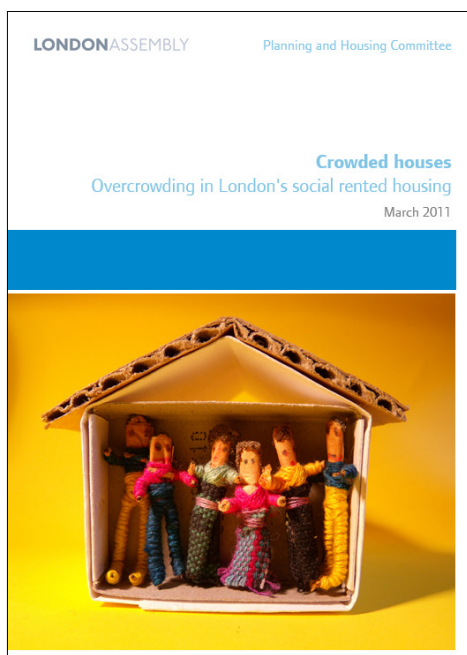
## Southwark rarely meets the housing targets



## Southwark – affordable housing completions average 532 per year



## Failure to deliver these homes will have an impact on overcrowding and affordability



- Households experiencing multiple housing problems have increased children's risk of ill-health and disability by up to 25 per cent.
- Overcrowding affects larger households disproportionately
- Overcrowding has a negative impact on children, especially health and educational attainment.
- About 331,000 London children live in crowded conditions
- One in three children in social rented housing are overcrowded.

Children in overcrowded housing are up to **ten times more likely to contract meningitis** than children in general.

There is a direct link between **childhood tuberculosis and overcrowding**.

Mental health issues such as **anxiety and depression** have also been linked to **overcrowded and unfit housing**.

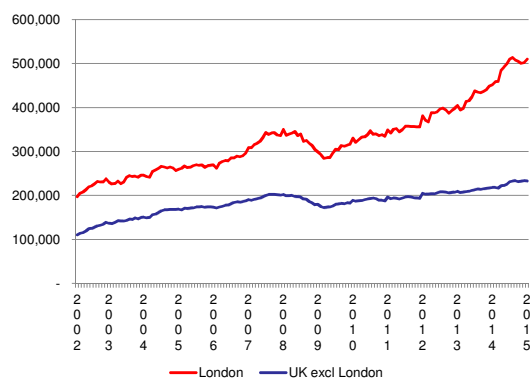
Overcrowded housing affects children's **ability to learn at school and study at home**.

Children in overcrowded homes **miss more school due to illnesses and infections**.

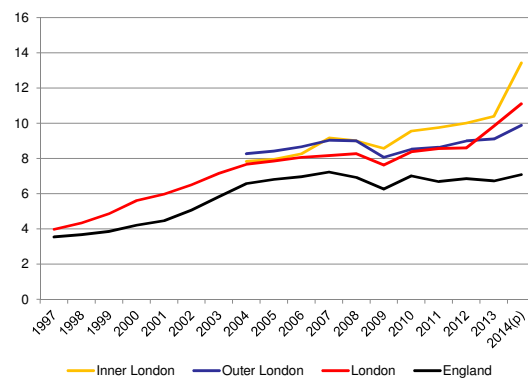
Overcrowding is linked **to delayed cognitive development**.

## London's unaffordable housing

**Average house price**



**Price to earning ratio**





## Southwark house prices have increased 602% in twenty years



## Density - Co-location and mixed use development

### Policy Good Growth 2: Making the best use of land

To create **high-density, mixed-use places** that make the best use of land

... Opportunities for intensification of industrial land and co-location of industrial and residential uses [should be] fully explored...

Co-location of different forms of social infrastructure...

Examples of this include schools opening their facilities out of hours for use by the community...

## Co-location – Holy Trinity Primary, Dalston



With no funding available and increasing demand for primary school places, the design solution was simple... **within the dense urban context**. A replacement two form entry primary school built at ground and first floor with a double height play deck at second; and **101 new apartments above to cross-subsidise the school's expansion programme**.

## Protecting open space and promoting 'urban greening'

Mayor's long-term target of making more than 50 per cent of London green by 2050.

New provision or improved access particularly encouraged in areas of deficiency in access to open space. Local open space audits.

Urban greening covers a wide range of options including street trees, green roofs, green walls, and rain gardens.

Urban greening factor will determine how new development will be required to meet the 50 per cent target

## The urban greening factor – looks complicated but isn't (really?)

### Policy G5 Urban greening

The Urban Greening Factor for a proposed development is calculated in the following way:

$(\text{Factor A} \times \text{Area}) + (\text{Factor B} \times \text{Area}) + (\text{Factor C} \times \text{Area}) \text{ etc. divided by Total Site Area}$

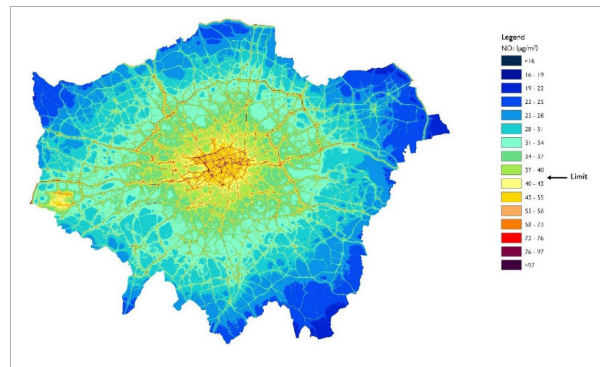
So, for example, an office development with a 600 sqm footprint on a site of 1,000 sqm including a green roof, 250 sqm car parking, 100 sqm open water and 50 sqm of amenity grassland would score the following;

$$(0.7 \times 600) + (0.0 \times 250) + (1 \times 100) + (0.4 \times 50) / 1000 = 0.54$$

So in this example, the proposed office development exceeds the interim target score of 0.3 for a predominately commercial development under part B of Policy G5 Urban greening.

## Shifting transport patterns and improving air quality

## London's air quality



### Revealed: thousands of children at London schools breathe toxic air

Exclusive: 802 schools, nurseries and colleges are in areas where levels of nitrogen dioxide breach EU legal limits

● How have you been affected by air pollution?



▲ The mayor of London has called for a diesel scrappage scheme to take polluting cars off the road. Photograph: Carl Court/Getty

Tens of thousands of children at more than 800 schools, nurseries and colleges in London are being exposed to illegal levels of air pollution that risk causing lifelong health problems, the Guardian can disclose.

▲ The Guardian has identified 802 educational institutions where pupils are exposed to illegal levels of air pollution.

**One-third of nursery schools, nearly 20% of primaries and 18% of secondary schools in the capital are in areas where toxic levels of nitrogen dioxide threaten children's health**

The European nitrogen dioxide (NO<sub>2</sub>) legal limit is 40 micrograms of nitrogen dioxide per cubic metre of air

## London schools to be alerted on high air pollution days

Schools will receive an alert every time air pollution is high enough to pose an acute health risk, under new plans announced by Sadiq Khan



▲ Pupils from Bowes Primary School in Enfield, north London, campaign against air pollution outside their school. Photograph: Chris Radburn/PA

Schools in London will receive an alert every time air pollution in the capital is set to pose an acute risk to health as part of a renewed push to highlight the scale of the capital's toxic pollution crisis.

Air pollution causes about 40,000 early deaths a year in the UK - more than 9,000 in London - and the young are particularly vulnerable.

The mayor of London, Sadiq Khan, already sends alerts to train stations and bus stops when pollution levels reach dangerous levels, advising vulnerable groups including children and the elderly to take precautionary measures.

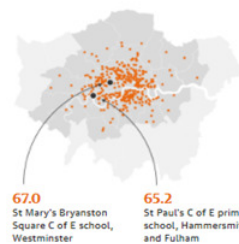
### All schools over the limit 802 schools in 25 boroughs



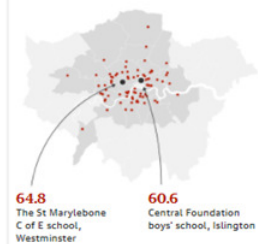
### State nurseries 27 schools in 14 boroughs



### Primaries 360 schools in 25 boroughs



### Secondaries 79 schools in 20 boroughs



Guardian graphic | Compiled by the Greater London Authority

## London's schools with the worst air quality

Of the top 100 primary schools –  
**13 are in Southwark**

	% FSM	NO2 average
St George's Cathedral Catholic Primary School	12.1	64.3
St Jude's Church of England Primary School	12	55.6
Tower Bridge Primary School	26.3	55.0
Saint Joseph's Catholic Primary School, the Borough	16.8	53.2
The Cathedral School of St Saviour and St Mary Overy	9.7	51.4
Charlotte Sharman Primary School	10.3	51.1
Townsend Primary School	25.4	50.2
Grange Primary School	24.1	49.9
Victory School	10	49.7
Charles Dickens Primary School	22.2	49.0
Friars Primary Foundation School	17.1	47.8
St John's Walworth Church of England Primary School	20.8	47.8
St James' Church of England Primary School	24.6	46.6

Of the top 100 secondary schools –  
**11 are in Southwark**

	NO2 average
Notre Dame Roman Catholic Girls' School	55.9
St Saviour's and St Olave's Church of England School	54.9
Ark All Saints Academy	44.6
Sacred Heart Catholic School	44.5
Ark Globe Academy	43.5
Ark Walworth Academy	43.3
Harris Academy Peckham	42.6
University Academy of Engineering South Bank	41.7
Harris Academy Bermondsey	40.7
City of London Academy (Southwark)	40.5
Harris Boys' Academy East Dulwich	39.7

The European nitrogen dioxide (NO2) legal limit is 40 micrograms of nitrogen dioxide per cubic metre of air

## Transport and Healthy Streets....

Overall strategic target of 80% of all trips to be made by foot, cycle or public transport by 2041

Healthy Streets aims to improve health and reduce health inequalities, reduce car use, improve road safety, reduce vehicle emissions, increase walking, cycling and public transport use.

Development should be planned to deliver patterns of land use that enable people to make shorter and regular trips by walking and cycling.

## Ten Healthy Streets Indicators



The Healthy Streets Approach uses 10 indicators based on evidence of what is needed to create a healthy, inclusive environment in which people choose to walk, cycle and use public transport. New developments and public realm schemes should deliver improvements against the Healthy Streets Indicators.

## Air quality – the London Plan says....

Ensure that new developments are designed and built, as far as is possible, to improve local air quality and reduce the extent to which the public are exposed to poor air quality.

### **Air quality assessments**

### **Inventory of emission sources**

### **Air Quality Focus Areas**

Further **guidance** will be published on **Air Quality Neutral and Air Quality Positive** standards as well as guidance on how to reduce construction and demolition impacts

## The Draft Environment Strategy says...

Achieve legal compliance with UK and EU limits as soon as possible

A zero emission London by 2050, meeting World Health Organisation guidelines for air quality

- Impose restrictions on the emissions allowed from buildings and transport e.g. The Ultra-Low Emissions Zone.
- Introduce standards that London should be encouraged to meet e.g. Euro emissions standards for vehicles.
- Invest in or promote the use of technologies that either improve air quality or have a reduced impact e.g. Ultra-Low Emission Vehicles
- Encourage Londoners' to change their behaviour to mitigate the impacts of poor air quality e.g. through promoting active travel or school education programmes



## Other Mayoral air quality initiatives

**Toxicity Charge (T-Charge)** A £10 T- charge now applies during peak congestion polluting vehicles aren't welcome.

**Ultra Low Emission Zone** - World's first Ultra Low Emission Zone is to start April 2019, supersedes the T-charge and create stricter emissions standards for diesel vehicles, 24 hours, 7 days a week. Expected to reduce Nitrogen Oxide emissions by about 50 per cent in central London, 40 per cent in inner London and 30 per cent in outer London.

**London's buses** - The Mayor is spending more than £300 million retrofitting thousands of buses and committing to phase out pure diesel double deck buses from 2018.

**Protecting schools from pollution.** 50 'air quality' audits will take place at primary schools in areas exceeding legal limits of nitrogen dioxide.

**London's taxis.** New taxis licensed after 1 January 2018 will need to be zero emission capable.

## Things to watch out for

- Are housing targets being met – and are they affordable?
- What densities are being proposed – how do they affect family housing?
- What is the council doing to address overcrowding?
- Do new developments deliver new open space and play space?
- Are proposals for co-locating new schools sustainable?
- Is the council and TfL delivering healthy streets?
- What action is being taken to address air quality?