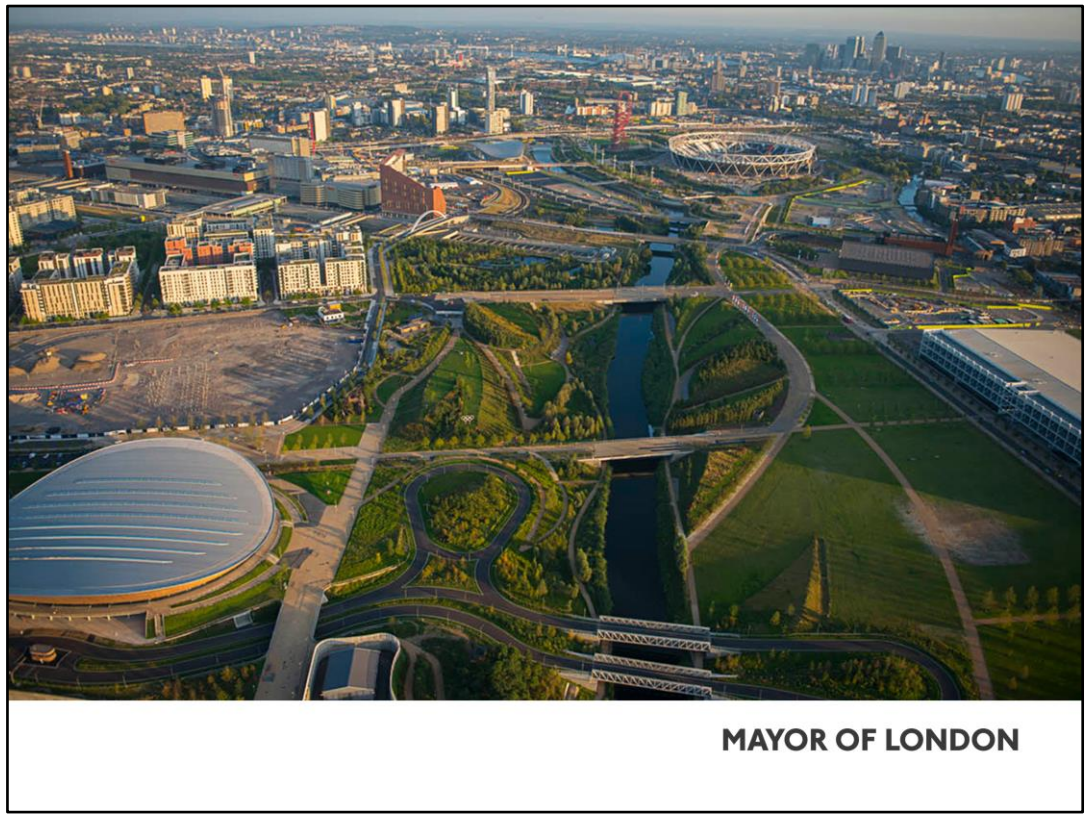

GREENING A GREEN CITY
TOWARDS A HEALTHY LIVEABLE CITY?
Peter Massini
Greater London Authority
MAYOR OF LONDON

London is a remarkably green city. On of the greenest of big cities.
http://www.gigl.org.uk/our-data-holdings/keyfigures/

We know that creating good quality green spaces is good for London's economy and environment, and despite the growing population green space (better described as green infrastructure – see below) can be integrated into the regeneration and renewal of the city.



The Queen Elizabeth Olympic Park is a high profile example of the concept of green infrastructure – green space designed to deliver a range pf services and benefits. We describe green infrastructure as the network of green spaces - and features such as street trees and green roofs - that is planned, designed and managed to deliver a range of benefits, including: recreation and amenity, healthy living, mitigating flooding, improving air and water quality, cooling the urban environment, encouraging walking and cycling, and enhancing biodiversity and ecological resilience.

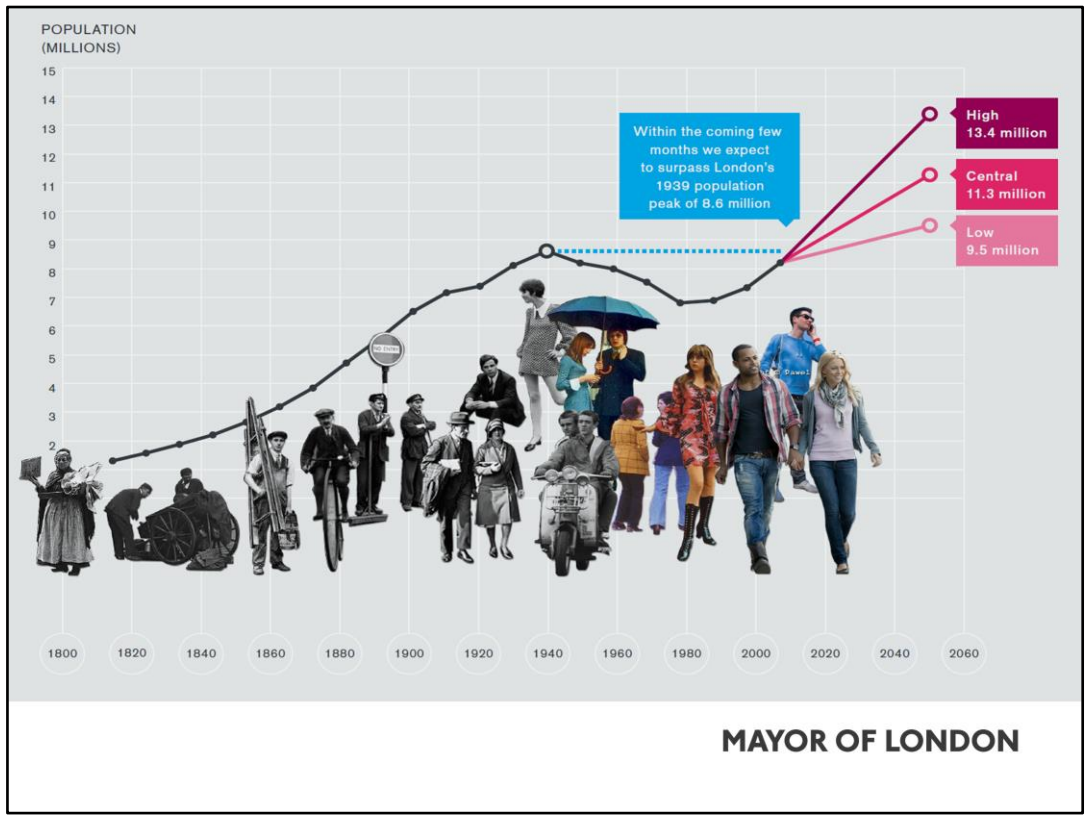
But despite the amount of green space in London much of it is just that i.e. it's green and its space. Many areas were designed primarily for recreation or outdoor sport. These are important requirement but if green spaces are designed and managed with only these objectives in mind it does not always result in the optimal use of the resource. Furthermore, from a health perspective the focus is on promoting physical health through providing opportunities for active sport and recreation. This does not necessarily address some of the most pressing health issues facing an urban population that is increasing (and competing for space) and ageing (and needing outdoor environment that are conducive to passive recreation and mental well-being).

The green space between buildings (particularly in suburbia) is also rarely managed for any other purpose other than the basic amenity provided by open space.

Considering the design and management of existing green space is vital if we are to create a network of green infrastructure that contributes to creating amore liveable city. Just as it is important to regenerate poor quality housing (such as the Aylesbury Estate depicted above) is it necessary to rethink the purpose of the adjacent green space (Burgess Park) to ensure that it complements the objectives of estate regeneration.

Burgess Park regeneration

www.lda-design.co.uk/projects/burgess-park-london/



London is facing a number of challenges:

Population growth – London is growing. Current projections indicate that London's population will grow from the current 8.5million to 11 or 12 million by 2050.

Climate change – current projections indicate an increase in surface-water flooding (as a result of intense summer storms and wetter winters) and an increase in heat-waves. Both surface-water flooding and heatwaves are exacerbated by the densification of the city which will result from population increase.

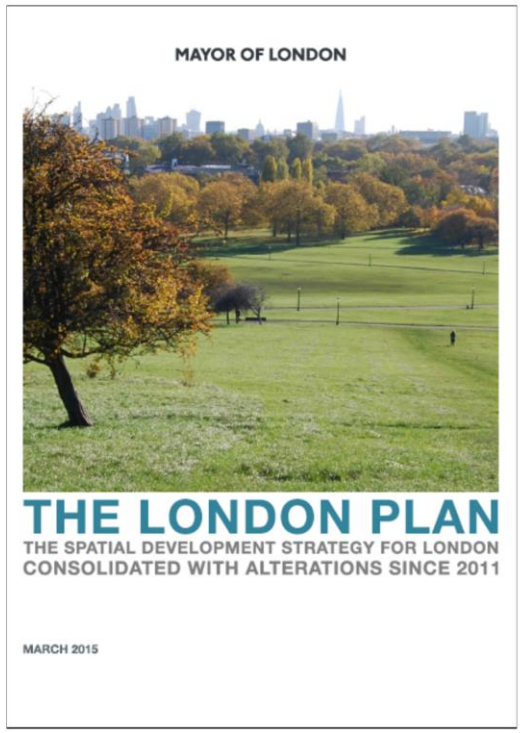
MAYOR OF LONDON

Air pollution:

London already suffers from poor air quality. Policies to curb exhaust emissions will tackle some of the most serious problems but cities are always likely to suffer from a degree of poor air due to construction activity and the other particulates generated by motor vehicles (such as the degeneration of brake linings).

Increasing densification:

London needs to build approx. 50,000 new homes (plus associated infrastructure) per annum to meet the needs an the expanding population. Most politicians agree that London should not spread outwards, consequently London is likely to become a denser city.



TRADITIONAL POLICY

METROPOLITAN OPEN LAND

LOCAL OPEN SPACE

BIODIVERSITY

TREES & WOODLANDS

NEW POLICY

GREEN INFRASTRUCTURE

URBAN GREENING

GREEN ROOFS

SUSTAINABLE DRAINAGE

MAYOR OF LONDON

The London Plan provides the spatial framework for London. Previous versions of the London Plan have contained policies which seek to protect and conserve London's green open spaces, the city's wildlife and it's trees and woodlands. These policies have been reasonably successful.

But to address future challenges an additional policy framework is required based on the concepts of green infrastructure and urban greening….

https://www.london.gov.uk/what-we-do/planning/london-plan/current-london-plan

https://www.london.gov.uk/what-we-do/planning/london-plan/current-london-plan/london-plan-chapter-2-londons-places/policy-218

https://www.london.gov.uk/what-we-do/planning/london-plan/current-london-plan/london-plan-chapter-5/policy-510-urban-greening

….and supplementary guidance that identifies how green infrastructure and urban greening (amongst other things) can improve health and liveability.

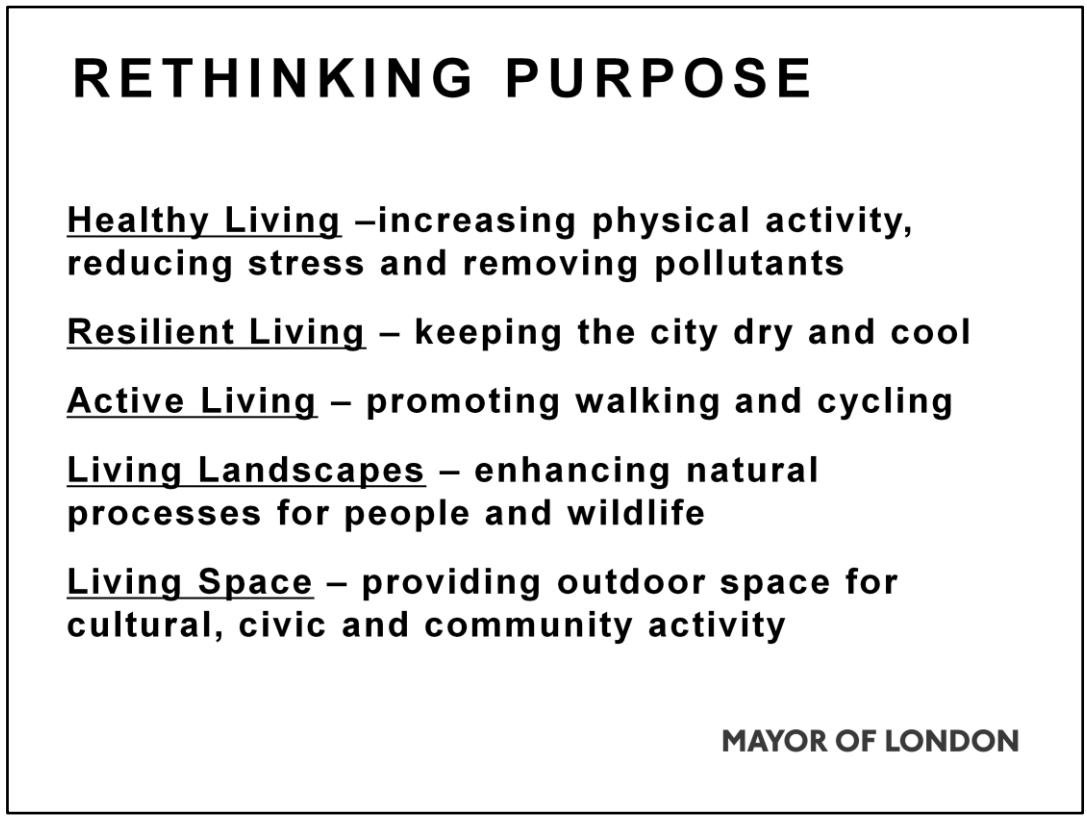
https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/social-infrastructure

http://content.tfl.gov.uk/improving-the-health-of-londoners-transport-action-plan.pdf

Consequently, green infrastructure has been identified as just as important as London's infrastructure needs and the report of the Green Infrastructure Task Force sets out a route map to delivery.

https://www.london.gov.uk/WHAT-WE-DO/BUSINESS-AND-ECONOMY/BETTER-INFRASTRUCTURE/LONDON-INFRASTRUCTURE-PLAN-2050

https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/green-infrastructure-task-force-report



The Green Infrastructure Task Force states that it is necessary to rethink the purpose of London's existing green space network. It proposed framing the purpose of green infrastructure as the objectives listed above.

We are changing the way we manage rivers and flooding by removing rivers from pipes and concrete channels…

… to a more naturalised channel than not only improves the ecology of the park but results in a significant increase in flood storage and a much more aesthetically pleasing space resulting in greater use and more prolonged use by local residents.

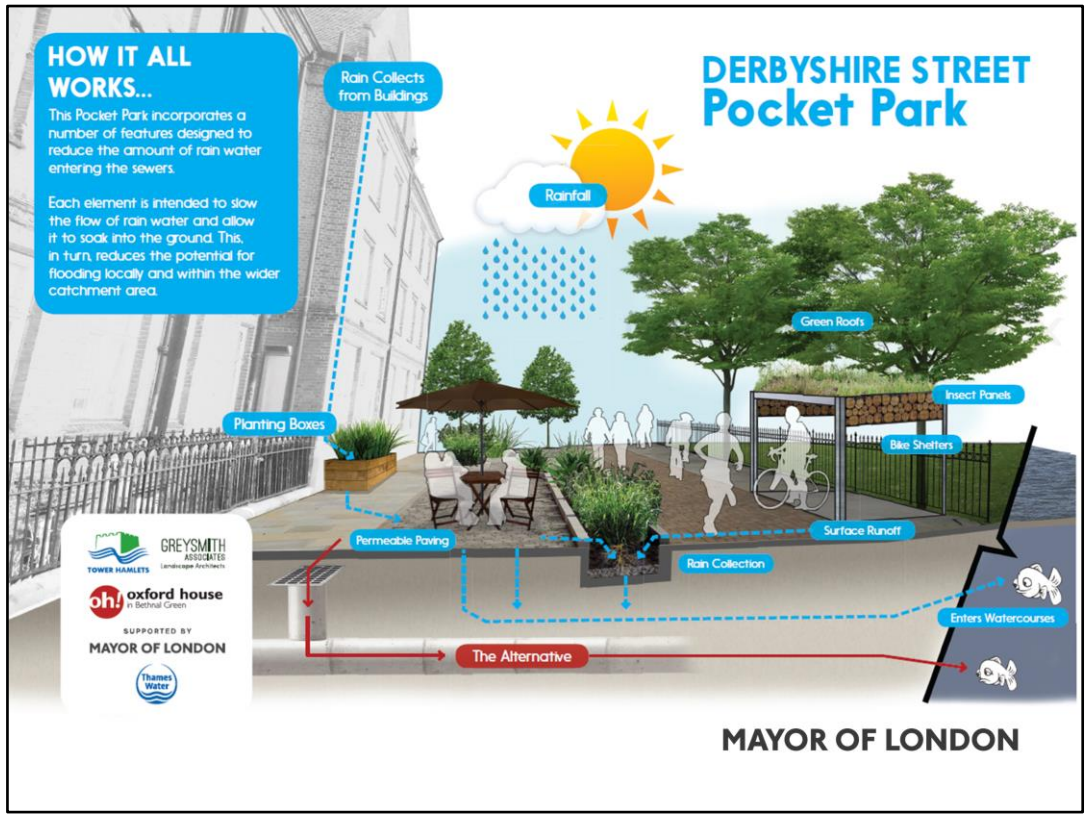
http://www.thames21.org.uk/wp-content/uploads/2013/07/Ravensbourn-CIP.pdf

We are changing the way we think about streets. The road and street network is a significant component of London's public realm although it has been designed and managed primarily to support free-flow of traffic. As we change our relationship with the car in urban areas we can begin to liberate some of this space for a wider variety of uses…

…. making better use of the space and improving its function.

The images show the before and after of Derbyshire Street Pocket Park. The dead end street has been converted into a small, green civic space which provides outdoor amenity for the adjacent community centre, a new walking and cycling route through to the high street beyond and an example of sustainable drainage through the use of a planted swale and permeable paving.

http://greysmithassociates.com/project/pocket-park/


HOW IT ALL WORKS...
This Pocket Park incorporates a number of features designed to reduce the amount of rain water entering the sewers.
Each element is intended to slow the flow of rain water and allow it to soak into the ground. This, in turn, reduces the potential for flooding locally and within the wider catchment area.
Rain Collects from Buildings
DERBYSHIRE STREET
Pocket Park
Rainfall
Green Roofs
Insect Panels
Bike Shelters
Planting Boxes
Permeable Paving
Surface Runoff
Rain Collection
Enters Watercourses
The Alternative
TOWER HAMLETS
GREYSMITH ASSOCIATES
oh! oxford house in Bethnal Green
SUPPORTED BY
MAYOR OF LONDON
Thames Water
MAYOR OF LONDON

On a grander scale major roads can be redesigned to encourage more walking and cycling and improve the look and feel of the street scape without compromising traffic flow.

Garibaldi Street in Lyon (France) has been completely re-engineered to create a green walking and cycling route and areas for storage of storwater run-off from the road surface.

http://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_trees-in-hard-landscapes_september_2014_colour.pdf

We are transforming London's roofscape.

In the most densely developed parts of the city it is challenging to introduce new greenery at street level. But roofs offer an oppprtunity for extensive greening which can be designed to provide a variety of benefits including stormwater retention, urban cooling, food growing or biodiversity conservation. This roof on the PWC offices at More London has been designed to enhance biodiversity but also provides a much more interesting and pleasing outlok for PWC staff than the grey roofscape it replaced.

https://www.cityoflondon.gov.uk/services/environment-and-planning/planning/heritage-and-design/Documents/Green-roof-case-studies-28Nov11.pdf

By considering green infrastructure and urban greening at the beginning of the masterplanning design process a wide range of benefits can be provided in new developments and in London's parks and green spaces.

http://www.berkeleygroup.co.uk/media/pdf/5/0/Berkeley-WoodberryReport-2014.pdf


THANK YOU
peter.massini@london.gov.uk
@LDN_Environment
@PeterMassini
MAYOR OF LONDON