Proposals to improve London's environment

5.18 'Better streets'

5.18.1 Introduction

526 The Mayor has set out his ambition to revitalise London's public space in his manifesto 'London's Great Outdoors'. Public spaces help to define a city and a well designed built environment – encompassing the historic and new – can bring communities and people together. They can also encourage physical activity and recreation, restore a sense of pride in an area and attract businesses and jobs.

527 The transport system – in particular station buildings and forecourts, streets and other pedestrian thoroughfares including squares and piazzas – form a key element of London's urban realm and therefore play an important role in meeting the Mayor's ambition. Achieving bold improvements to such buildings and spaces is therefore one of his priorities.

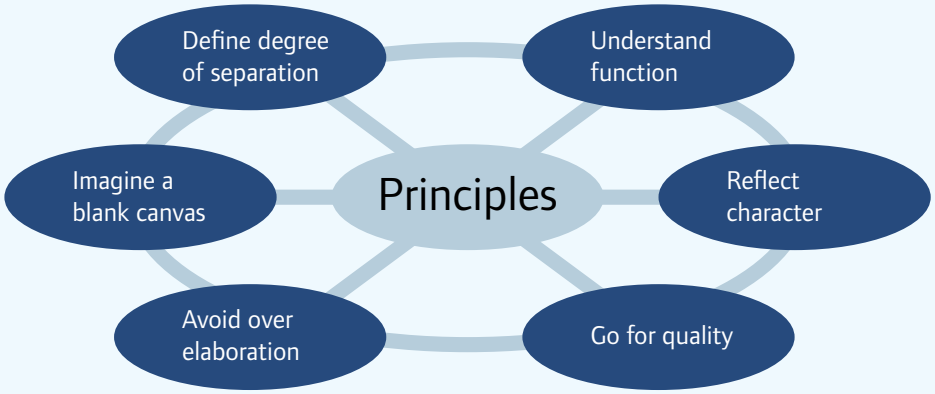
528 London's Great Outdoors was accompanied by 'Better Streets', a practical guide intended to make the vision for great spaces a reality. It sets out how 'better streets' can be created and proposes a series of actions to deliver them. The underlying principles include finding a new working balance between the different users of London's streets and spaces, distinguishing our streets with good quality sustainable materials with high levels of craftsmanship, and reflecting local character. This approach applies to all streets and spaces rather than just flagship schemes. Improving the streetscape effectively will require coordination and integration with other public bodies to create imaginative and liveable environments for everyone.

5.18.2 The principles and stages of creating 'better streets'

529 The enjoyment of the built environment and setting of the historic environment can be curtailed by unnecessary signs and guardrailing that restrict pedestrian movement. Consolidating remaining street features helps, while major rethinking of the function of streets can have dramatic effects. Figure 54 shows six principles for 'better streets' and Figure 55 the five stages to improve them.

530 Because 'better streets' must be sensitive to location and context, the key to their successful creation is found less in highway design manuals than in the imaginative application of certain principles to the design of the urban realm.

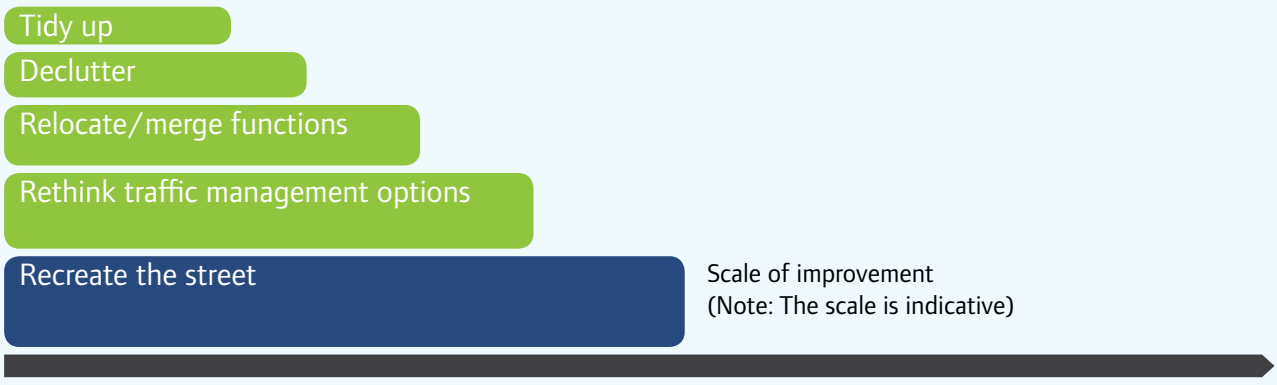
Figure 54: Six principles for 'better streets'



Major public space projects will transform neighbourhoods. However, in most cases, street design should not draw attention to itself.

It should be based on simple and robust principles which reflect the characteristics of London and its neighbourhoods.

Figure 55: Five stages to improve streets



Public spaces are part of what helps to define a city. Well-designed public spaces have many benefits. There are actions to improve public space that can be carried out quickly and achieve substantial improvements in the short term, while others may require consent and longer design and procurement processes. It is possible to work in five layered stages.

531 There is no one design or template of 'better streets' that can be applied to existing streets. Each location and context is unique; streets will fulfil different purposes, have different vehicle and pedestrian flows and will have their own character. Over-elaborate design is rarely impressive over the longer term. Simplicity of design, ensuring every feature is carefully justified and where care is taken to minimise the clutter of lighting, signage and materials, creates the best streets. The quality of materials is important and must allow for the street to reflect the character of the surrounding buildings and spaces.

532 There are several layers of intervention that can improve London's streets (see Figures 54 and 55). There are 'quick wins' that can achieve substantial improvements in the short term, while others may require longer design and implementation processes. Through incremental stages, streets can be improved to different extents. The simplest starting point is tidying up the existing streetscape and decluttering the street, for example, removing unnecessary road markings, signs, guardrailing and bollards. Further steps seek to merge functions, for example, moving a road sign to an existing lighting column rather than it having its own pole, and rethinking traffic management options such as reducing carriageway width and providing more generous pavements for pedestrians. The final stage is where the whole street is recreated, rethinking the road space and how road users interact in order to provide a 'balanced street'.

533 In designing such spaces across London, the needs of all users and, in particular, those with reduced mobility, visual impairment and deaf people should be taken into account. Equally, the creation of such spaces should give due consideration to the local historic and cultural context, being aware of the physical streetscape and environment within which such a space is created.

5.18.3 Application of 'better streets' principles to town centres

534 For town centres, the package of possible solutions could include improved facilities for pedestrians, cycling, essential deliveries and 'better streets'. Regeneration benefits may be realised too. Improvements need to be considered on a location by location basis and solutions that are appropriate to the local context.

Proposal 83

The Mayor, through TfL, and working with the London boroughs and other stakeholders, will use the principles of 'better streets' to seek to improve town centres, in particular: removing clutter and improving the layout and design of streets; enhancing and protecting the built and historic environment; increasing the permeability of streets; and creating clear and easily understandable routes and spaces to make it easier for cyclists, pedestrians and disabled people to get about.

5.18.4 Application of the principles to create 'better streets'

535 Designing streets primarily for motor vehicles has a detrimental effect on the ability of pedestrians to move, the setting of the historic environment and the enjoyment of the street scene. Making streets attractive for cycling and reorganising them by removing gyratories and one-way streets can improve the urban environment.

536 Schemes removing the dominance of motor vehicles in streets especially where there are heavy pedestrian flows are sometimes termed 'shared space' schemes and vary considerably. A common element is the changed way vehicles and pedestrians interact. A balanced street is one that has minimal clutter, uses good quality materials and encourages a degree of negotiation between road users. There are few if any traffic lights with formal crossings understated. Each improvement must be designed in the local context, be consulted on (including with blind and visually impaired groups) and be carefully monitored.

Proposal 84

The Mayor, through TfL, and working with the London boroughs and other stakeholders, will introduce accessible for all, 'better streets' initiatives. Consideration will be given to trialling the removal of traffic signals where safe and appropriate.

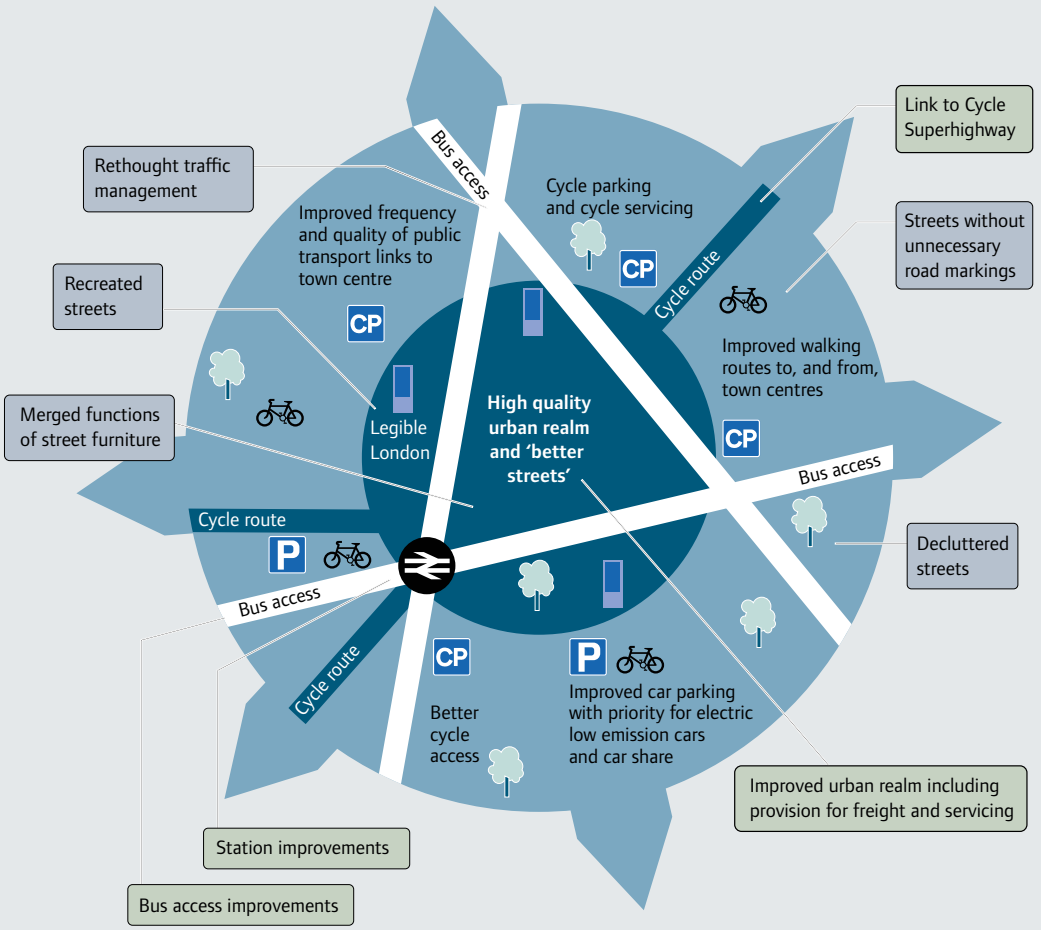
5.18.5 Making the most of infrastructure investment to improve streets and town centres

537 With good design input and, where appropriate, local consultation, there are opportunities to improve the built environment when installing new transport infrastructure. This can range from small scale footway improvements when installing bus stops and street lighting, to comprehensive urban realm, pedestrian and cycle schemes associated with railway station schemes.

538 Each town centre is unique and each fulfils distinct commercial, educational, leisure and increasingly, residential functions for its catchment area which generate demand for passenger and freight transport. In addition to urban realm improvement, a package of further measures can reduce the environmental and social impacts of such demand and improve the amenity and quality of the town centre.

539 Pedestrians can benefit from improved walking routes to town centres, cyclists can take advantage of improved parking, cycle superhighways and local cycle hire schemes. Public transport access can be improved with new facilities or service enhancements. Parking arrangements for low or zero emission cars could also help encourage more environmentally friendly town centre access for those unable to travel by public transport, foot or bicycle. Park and ride schemes may also be suitable, in some circumstances, at some town centres to further reduce the number of vehicles entering the area. Figure 56 illustrates these improvements.

Figure 56: Illustrative town centre improvements



540 Proposals in smarter transport of freight and services (section 5.24.3) and parking and loading (5.26) will help ensure appropriate freight access arrangements are in place so local businesses are able to get the goods and services they need without adversely affecting other road users. DSPs could help ensure deliveries take place at the most appropriate time, with well-trained staff using environmentally friendly vehicles, optimising the use of loading facilities.

Proposal 85

The Mayor, through TfL and the LDA, and working with the London boroughs, Network Rail and other stakeholders, will seek to implement integrated and complementary improvements to town centres, streets and pedestrian and cycling routes directly adjacent to where major public transport investment projects are being delivered, using sustainable materials.

Case study

The Cut, Southbank

The Cut, spanning Southwark and Lambeth, is now a lively 'better balanced' street which includes housing, shops, restaurants, both the Old and Young Vic theatres and a college. Previously dominated by traffic, it has undergone a transformation. The project was a successful collaboration between the Cross River Partnership, TfL, the boroughs, the local community and business groups who have delivered a 'better balanced' shared space street. The Cut features:

- Improved pedestrian access by providing widened footways and raised tables, redesigned carriageway and junctions
- Improved quality of the shared urban realm, with quality materials (York stone), rationalised elegant street furniture, demarcated outdoor dining and new cycle stands
- Improved sense of wellbeing and personal safety of people using the street, with the introduction of better lighting levels and a strict time-restricted waste management system, new trees and solar-powered parking meters
- Improved trading environment for local businesses – pedestrian surveys show that evening and weekend footfall on The Cut has increased by more than 35 per cent which has greatly enlivened the area and benefited local businesses

The transformation has also encouraged the use of more sustainable means of transport, with average traffic speeds dropping from 29mph to 17.4mph and lower vehicles numbers, creating a more pleasant and safer environment for pedestrians and cyclists.

5.19 Improving noise impacts

5.19.1 Introduction

541 London's transport system delivers significant economic, social and environmental benefits to the city. However, it can have negative impacts on the local environment. Ambient noise from transport in London is higher than elsewhere in the country and this can influence an individual's health and wellbeing.

542 A fifth of Londoners are annoyed or disturbed in their homes by noise compared with one in 10 nationally, with buses and lorries creating the most disturbing noise. Noise can interfere with sleep, speech and concentration, and there is increasing concern at the potential physical health effects. Minimising transport ambient noise and improving perceptions of noise levels therefore has benefits for the quality of life of Londoners.

543 The strategy will assist in the management of noise in the context of sustainable development. The Mayor is committed to reducing ambient noise from transport. He controls the GLA Group's vehicles and transport system and wants to influence other transport sources of ambient noise, for example, aircraft.

5.19.2 Reducing the noise impacts of roads and public transport

544 Reducing ambient noise via engineering and design solutions is integral to transport operation. TfL monitors noise pollution by the number of noise-related complaints received, the proportion of the TLRN covered by lower noise road surfacing and by the proportion of buses in the fleet at least two decibels (2dB(A)) quieter than the legal limit. For the first time in three years, the number of complaints received increased by 16 per cent during 2007/08. This can be attributed to major construction work on the East London line and complaints associated with announcements from Tube PA systems. TfL is addressing these issues by using Best Practical Means in construction works, amending PA systems, the Tube's rail maintenance and track replacement works programme, and through considering the noise impact of transport projects.

545 There is further scope to take action where people are significantly exposed and affected by transport noise. Under the Environmental Noise (England) Regulations 2006 (as amended), noise 'hot spots' have been identified where the relevant highway and rail authorities are required to assess the scope and need for additional noise management in the context of sustainable development. For example, noise barriers, though expensive, may be a solution in some areas and regulations governing the provision of sound insulation may be reviewed.

Proposal 86

The Mayor, through TfL, and working with the London boroughs and other stakeholders, will target the provision of noise reduction measures and noise mitigation measures in areas significantly affected by transport noise, to improve perceptions of noise and reduce the impacts of noise on dwellings and people, by:

a) Timely and effective rail maintenance and replacement works

b) Working to the TfL Health Safety and Environment policy

c) Ensuring all new transport projects consider noise mitigation

d) Introducing road maintenance programmes to replace road surfaces with low noise surfacing where possible

e) Improving traffic management and signal control techniques

f) Introducing speed enforcement measures which do not encourage noisy, rapid acceleration and deceleration

g) Introducing quieter buses

h) Procuring new, quieter public sector service vehicles, potentially through joint procurement to achieve efficiency

546 Many of the strategy's proposals to introduce lower carbon/lower air pollutant vehicles will have noise reduction benefits. The Mayor's Electric Vehicle Delivery Plan is one part of his strategy to decarbonise transport and improve air quality in London. Another benefit of stimulating the market for EVs is the very low noise emission from these vehicles.

547 Although engineering and design solutions and regulation and enforcement can go a long way to reducing ambient noise, changing people's behaviour can also make a big difference.

548 Better freight management is being pursued by TfL, working with freight operators, in its London Freight Plan, for example, through DSPs. However, more can be achieved by introducing additional noise reduction measures through the supply chain. London Councils run the London Lorry Control Scheme which restricts the movements of HGVs in the city at night and weekends. It aims to limit noise impacts in residential areas. FORS members, for instance, could demonstrate quiet delivery practices using the 'silent approach' method, supported at selected sites by the Noise Abatement Society. Adoption of these practices may improve the efficiency of deliveries and the wider road network by enabling out-of-hours servicing.

Proposal 87

The Mayor, through TfL, and working with London Councils, London boroughs, freight operators, and other stakeholders, will explore opportunities to use the London Lorry Control Scheme to encourage companies to operate quieter vehicles as well as to promote improvements in air quality, and reduce CO_2 emissions.

549 Wider education initiatives can encourage people to employ driving styles that reduce emissions and reduce noise. TfL has carried out a campaign for eco-driving to reduce CO_2 emissions, and this will be extended to include noise.

Proposal 88

The Mayor, through TfL, and working with the London boroughs, motorist organisations, freight operators and other stakeholders will encourage quieter driving through publicity campaigns aimed at private drivers and motorcyclists, and training programmes for professional drivers.

5.19.3 Aircraft noise

550 Aircraft noise is a particularly difficult issue for London as Heathrow is located on its western boundary. With prevailing winds, most flights approach over the city. An independent study of public attitudes to aircraft noise for the DfT concluded the public is more annoyed by aircraft noise now than in 1985 when the last major study was carried out. As highlighted elsewhere in the strategy, and the draft replacement London Plan policy 6.6b, the Mayor is opposed to further expansion at Heathrow due to its adverse noise and air quality impacts.

551 The Mayor is also keen to explore with the Government and aviation stakeholders, such as the national air traffic control service, ways of varying flight paths to reduce aircraft noise impacts, such as the preferred direction of approach for night landings. There is European Commission legislation concerning the noise performance of aircraft.

Proposal 89

The Mayor, through TfL, and working with the DfT, the national air traffic control service and the European Commission, will:

a) Encourage the development and use of quieter aircraft

b) Seek to coordinate flight paths so they minimise their impact on London

5.20 Enhancing transport's contribution to the natural environment

552 London's rail, road, cycling, walking, river and canal networks provide essential habitats for wildlife across the city. Approximately two-thirds of London's land area is occupied by green spaces and water. LU alone manages about 10 per cent of the wildlife habitats in the city – more than 4,000 hectares across London and parts of the surrounding counties.

553 Due to its linear nature, the transport system provides a multitude of green corridors along which plants and animals can thrive and, as much of this property is inaccessible to the public, it provides a safe and undisturbed refuge for wildlife. Transport buildings can also play a role, for example, with green station roofs.

554 To illustrate the importance of transport land in supporting biodiversity, around 550 plant, 42 bird, 14 mammalian, 538 invertebrate, three reptile and three amphibian species have been recorded on TfL's land. This includes deer, water voles, pipistrelle bats and great crested newts.

555 London's transport operators have a duty to promote biodiversity and support the UK and Mayor's biodiversity strategies. LU, Network Rail and the Highways Agency all have Biodiversity Action Plans and the boroughs have local biodiversity protection and enhancement policies in their Local Development Frameworks. Proposal 113 in this strategy describes how there will be an additional 10,000 street trees by 2012, with the aim of additional two million trees by 2025.

Proposal 90

The Mayor, through TfL, and working with the DfT, Highways Agency, London boroughs, Network Rail, and other stakeholders, will make the most of open spaces across the transport system (for example, green spaces alongside railway lines, roads, rivers, canals, cycling and walking routes, green grids and on roof tops) to improve the quality and diversity of London's natural environment.

5.21 Improving air quality

5.21.1 Introduction

556 Despite improvements in recent years, transport in London remains a significant source of air pollutant emissions contributing to the overall concentrations of pollutants in the air and adversely affecting the health of Londoners.

557 There are two main air pollutant emissions from ground-based transport:

- Oxides of nitrogen (NO_x) – consisting of both NO and NO_2
- Particulate matter (PM) of varying size fractions, notably PM_{10} and $PM_{2.5}$

558 The extent to which transport affects air quality can clearly be seen from Figure 57 and 58 which show measured NO_2 and PM_{10} concentrations. The highest levels are found around busy roads and diesel-operated rail lines, with a clear concentration around Heathrow.

5.21.2 European Union and national air quality objectives

559 The Mayor has a legal obligation to put forward policies and proposals for the implementation of the national air quality strategy and to achieve in Greater London the air quality standards and objectives prescribed in regulations made under the Environment Act 1995. These regulations transpose into UK law the European Union directive on air quality establishing limit values for PM_{10} and NO_2.

560 For PM_{10} a small number of locations focused in central London are currently exceeding the PM_{10} daily limit value (which was supposed to be met by 2005). For NO_2 wider areas of Greater London are exceeding the annual mean limit value, which was supposed to be met by 2010. The Government is in the process of applying for an extension to the deadlines for meeting these limit values to 2011 for PM_{10} and 2015 for NO_2. The directive has also established limit values for $PM_{2.5}$ and these limits are currently being transposed into UK law.

561 Modelling suggests that without further action London will be at risk of exceeding the PM_{10} daily limit value in a small number of central London locations near major roads in 2011. In 2015, the NO_2 limit values will be exceeded across Greater London, particularly around Heathrow, in central London and near major roads. Road traffic is a significant source of air pollutant emissions in London.

562 Air pollutant emissions do not respect London's administrative boundaries. Around 40 per cent of London's PM_{10} and 20 per cent of its NO_2 concentrations are caused by emissions outside London. Consequently, some of the most effective policies to address air quality need to be implemented on a national basis, for example: changes to vehicle excise duty, further national scrappage schemes, certification of NO_x abatement equipment and establishing a framework for promoting ultra low emission vehicles.

563 Nevertheless, London must play its part in helping the UK meet the EU limit values

Figure 57: NO_2 annual mean concentrations (µg/m^3), 2008

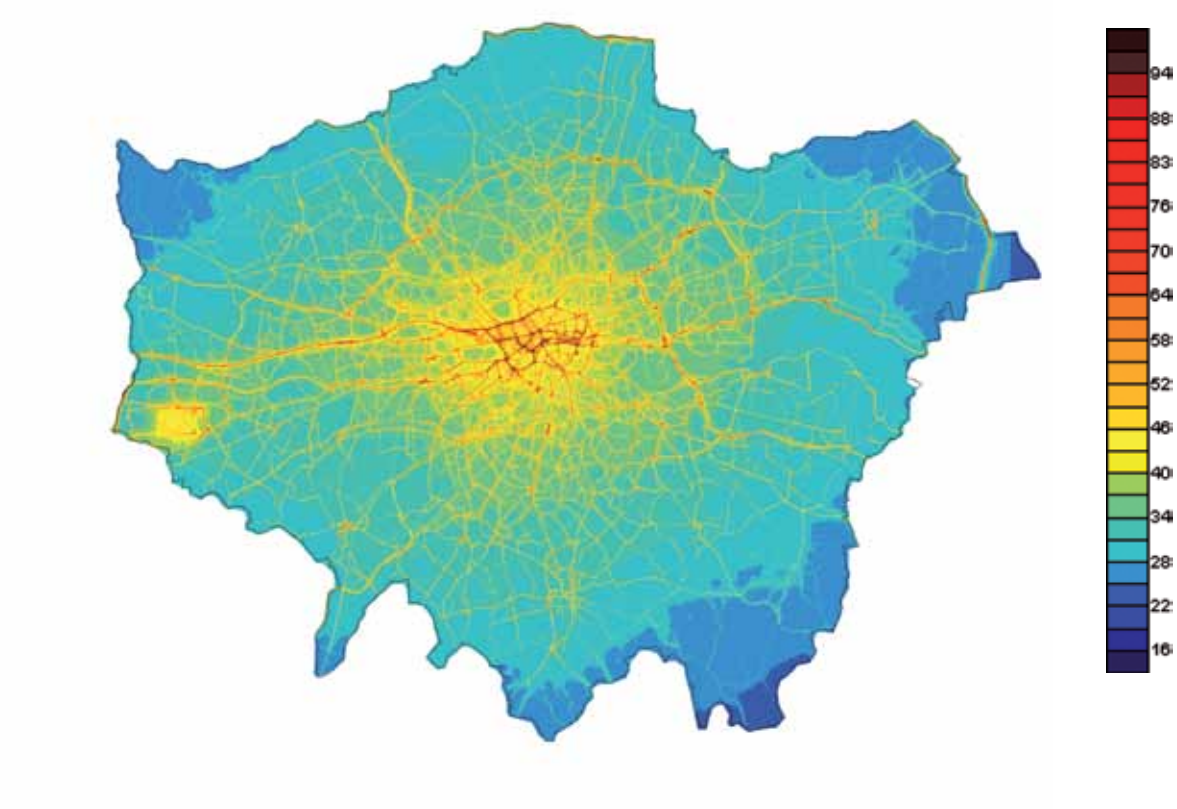
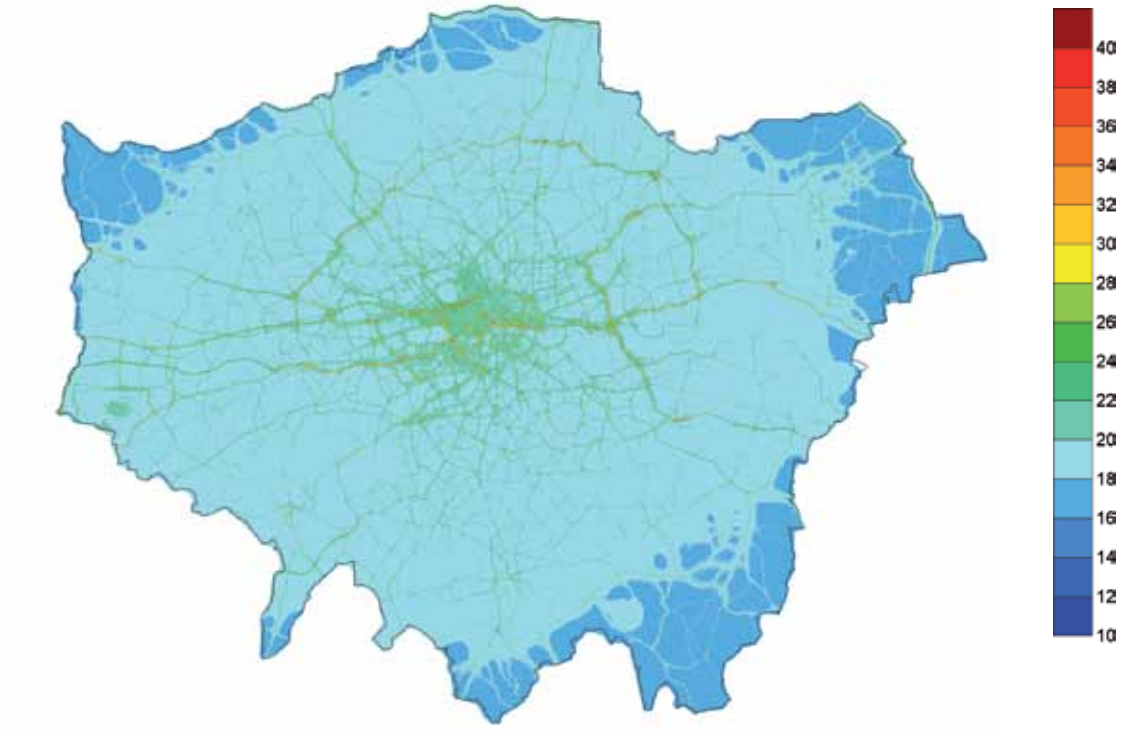


Figure 58: PM_{10} annual mean concentrations (µg/m^3), 2008



and securing improvements in public health. Consequently, the air quality proposals in this chapter have been developed to help achieve the biggest improvement in air quality possible. In doing this, the Mayor is committed to demonstrating value for money for London's taxpayers and avoiding any undue burdens on London's economy, particularly its small businesses. Going forward, it will be necessary to adopt a proportionate approach which will secure improvements using incentives first. Where disincentives are required these will be targeted and cost-effective.

564 While developing the policies in the strategy, particular attention has been paid to maximising co-benefits to help achieve other Mayoral objectives including those for climate change and noise. Improving air quality also requires capturing the benefits of other proposals found elsewhere in this strategy, for example, modal shift.

5.21.3 Behavioural changes

565 Promoting behavioural change is an effective and relatively quick way of reducing vehicle emissions by providing Londoners with the necessary information to make smarter choices. Namely, more walking and cycling for short journeys and greater use of public transport where possible. When cars are needed, Londoners should be encouraged to adopt the most sustainable patterns of car ownership (for example, through membership of car clubs, car sharing, purchase of fuel efficient vehicles and use of smarter driving techniques).

Proposal 91

The Mayor, through TfL and working with London boroughs, transport operators and other stakeholders, will encourage behavioural changes to reduce vehicle emissions, by:

a) Promoting walking and cycling, the use of car clubs, car sharing, the use of fuel efficient vehicles and smarter driving techniques and raising awareness about air quality

b) Implementing eco-driving training for all GLA/functional body, taxi and bus drivers

c) The Mayor will also reduce emissions from the wider fleet by supporting eco-driving training for members of the public and freight drivers (through the existing FORS scheme) and tackling emissions caused by unnecessary idling

d) Providing better information about emissions from private vehicles and the public transport fleet

5.21.4 Reducing emissions from public transport and the public sector fleet

566 By reducing emissions from rail, buses, taxis, PHVs, the GLA and boroughs' own fleets, overall levels of emissions, particularly of PM and NOx in central London, can be reduced. To do this it will be necessary to electrify London's remaining diesel railways, introduce new requirements for buses, taxis, PHVs and passenger boats and to promote new technologies such as low emission taxis which will help achieve long-term improvements in air quality.

Proposal 92

The Mayor, through TfL, and working with the London boroughs, DfT, Network Rail, train operating companies and other stakeholders, will introduce measures to reduce emissions, including:

a) Cleaner buses

b) Cleaner taxis and PHVs

c) Further rail electrification, including the recently announced Great Western Main Line electrification scheme and the Barking to Gospel Oak line

d) Cleaner passenger boats and other river vessels, which use more environmentally friendly fuels

e) Encouraging the introduction and use of cleaner public service and local authority vehicles

5.21.5 Reducing emissions from private vehicles

567 Tackling emissions from the London transport system and public sector fleets will not be enough by itself to meet the EU limit values, so further action to improve private vehicle emissions will be needed.

Proposal 93

The Mayor, through TfL, and working with the London boroughs and other stakeholders, will take further action to reduce private vehicle emissions, by:

a) Supporting the uptake of low emission vehicles, such as electric cars and vans

b) Incentivising of low emission vehicles through pressing for changes to vehicle excise duty and parking regulations

c) Working with the European Commission, the Government and vehicle manufacturers, the Mayor will encourage the development of new technologies which reduce vehicles emissions, such as better tyres which wear less, more sophisticated abatement technology and automatic hybrid-switching

5.21.6 Tackling poor air quality at priority locations[1]

568 Some locations have specific air quality problems as a result of the make-up of the vehicle fleet using them, traffic speed and other factors. The situation at these priority locations can be improved by tailored local action. This may include power washing roads and applying dust suppressants, focusing more hybrid buses on routes going through these locations and better enforcement of existing no-idling and no-stopping rules. Further improvements can be achieved by incorporating

[1] TfL has enhanced its understanding of local air quality. Rather than as individual sites (or 'hot spots') these need to be understood in their broader context as part of the road network. For this reason action will be targeted at larger connected corridors which will be known as 'priority locations' – see the Mayor's Air Quality Strategy for more detail

improved air quality measures into planned urban realm improvements and using scheduled refurbishment of the road surface to trial new surfaces. Where possible these measures should also deliver improvements for noise and CO_2 emissions as well as for air quality.

569 Any measures undertaken by TfL to improve air quality hot spots would be developed in close partnership with the relevant London boroughs, as these retain their own responsibilities for local air quality as part of the Local Air Quality Management process.

Proposal 94

The Mayor, through TfL, and working with the London boroughs and other stakeholders, will introduce targeted local measures at poor air quality priority locations to reduce emissions and improve local air quality.

5.21.7 London Low Emission Zone

Continuing the London Low Emission Zone

570 The Mayor will continue to operate the current LEZ scheme. The implementation of the next phase of the scheme in 2012, introducing a tightening of emission standards (to Euro IV PM) for HGVs, buses and coaches, will deliver further benefits for air quality.

London Low Emission Zone extension deferral

571 The Mayor has announced his intention to defer the extension of the London LEZ to LGVs and minibuses (previously known as Phase 3), which was due to be introduced in October 2010.

572 In the current economic downturn, the potential business costs and impacts for LGV and minibus operators associated with meeting the proposed emission standard (Euro 3 for PM) from 2010 are now more significant than when the LGV and minibuses phase of LEZ was confirmed in 2007. Having regard to the additional pressures facing business at this point in time, and to allow operators more time to comply and thus mitigate some of the potential impacts, the Mayor is proposing to defer the extension of the LEZ to LGVs and minibuses to an appropriate date in 2012. He will ask TfL to make the necessary variation to the Low Emission Zone Scheme Order.

573 TfL estimates that extending the LEZ to LGVs and minibuses in 2012 will reduce emissions of PM_{10} by around eight tonnes and emissions of NO_x by around 100 tonnes in 2011 through pre-compliance benefits. These are important in the context of meeting the 2011 EU daily limit value for PM_{10}. While delaying the extension of LEZ to LGVs and minibuses will reduce its benefits to some extent, it will allow time for the economic situation to improve for smaller operators to take the necessary action. The Mayor considers that this approach strikes an appropriate balance for London between environmental and economic objectives.

574 A range of other measures is being proposed to reduce emissions, but extending the LEZ to LGVs and minibuses is considered an important element of the overall package. It is important that action is taken to ensure the achievement of the EU targets and deliver health benefits

for Londoners. There is a need to reduce road transport emissions from different sources, such as buses, taxis, HGVs, coaches, cars – and also LGVs. The Mayor's Air Quality Strategy sets out the proposed approach in more detail. The Mayor will work with central Government, who need to play a key role in supporting action in London.

Developing the London Low Emission Zone

575 This combination of reduced emissions from the public and private fleets, behavioural measures and targeted local measures may still not sufficiently reduce emissions in the Capital, particularly NOx emissions, which is a London-wide problem. Therefore, the Mayor will consider – if needed to meet outstanding issues – the tightening of standards beyond 2015, additional zones and/or the inclusion of other vehicles.

Introducing a NOx standard

576 The Mayor proposes introducing a London-wide standard (Euro IV) for NOx emissions from 2015 for HGVs, buses and coaches in order to reduce these emissions and deliver benefits across London. This will include areas where emissions are particularly high in central, Inner and parts of Outer London such as around Heathrow. However, this will be subject to central Government delivering a national certification and testing scheme for NOx abatement equipment. The LEZ currently does not require operators to purchase newer vehicles to become compliant. An option is to fit a certified particulate trap to the vehicle. Similar compliance options must be available for the LEZ to be amended to include an emissions standard for NOx.

Consulting on changes

577 TfL will need to consult on a Variation Order to defer extending the LEZ to LGVs and minibuses to 2012. A Variation Order and public consultation will also be needed to include a standard for NOx emissions in the LEZ for HGVs, buses and coaches.

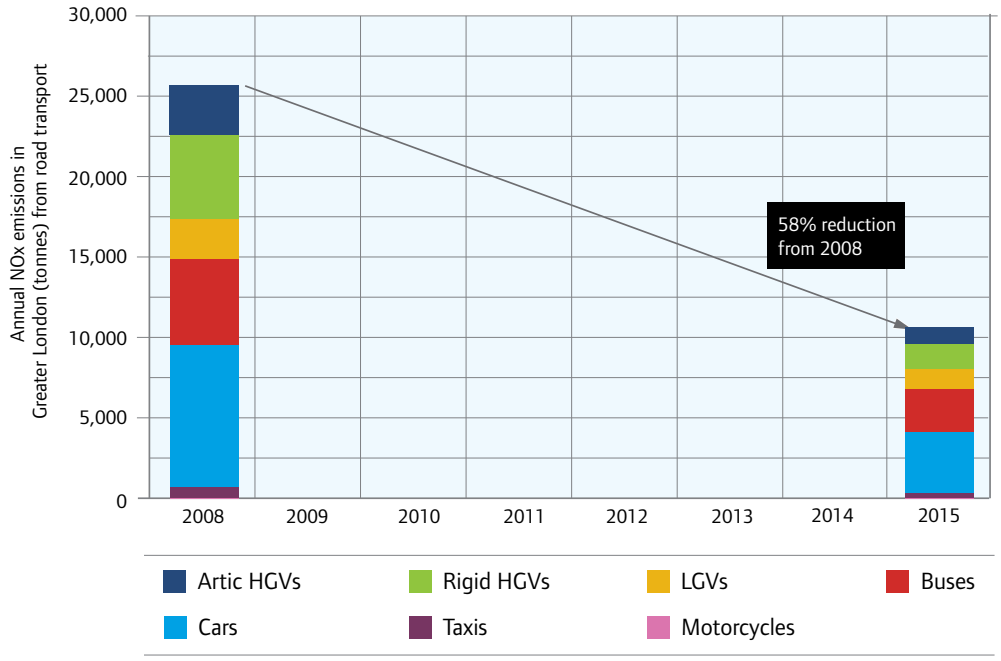
578 TfL would also need to consult widely on other proposals to introduce further changes to the current LEZ. To minimise costs to business, the Mayor would announce any further proposed alterations to the existing LEZ as early as possible, to maximise compliance time.

Local low emission zones

579 Given the localised nature of some aspects of the air quality challenge, it may also be appropriate for London boroughs to explore establishing their own LEZs in response to local circumstances. Where appropriate and in conformity with the MTS and consistent with other relevant Mayoral strategies, the Mayor may consider supporting these through the LIP process and other measures. Such schemes may also deliver benefits in relation to reduced CO_2 emissions and noise.

580 To ensure London-wide inter-operability and to minimise compliance costs the Mayor would work with the boroughs to establish guidelines for introducing a local LEZ should there be interest in doing so.

Figure 59: London NO_x emissions 2008 to 2015



Proposal 95

The Mayor, through TfL, will continue to operate the existing London Low Emission Zone. The Mayor will consider further tightening of the standards of the current LEZ, as well as the introduction of further emissions control schemes to encourage the use of cleaner vehicles in London:

a) The current LEZ scheme will continue to operate to reduce emissions from the heaviest vehicles, and tighter standards will be introduced in 2012 as planned

b) The Mayor will defer extending the LEZ to LGVs and minibuses (which was due to commence in 2010) to 2012

c) In 2015, the Mayor will, subject to technical feasibility, introduce an emissions standard for NOx (Euro IV) into the LEZ for HGVs, buses and coaches

d) If necessary, the Mayor will consider introducing minimum requirements for other vehicles or tighter standards in particular locations within London

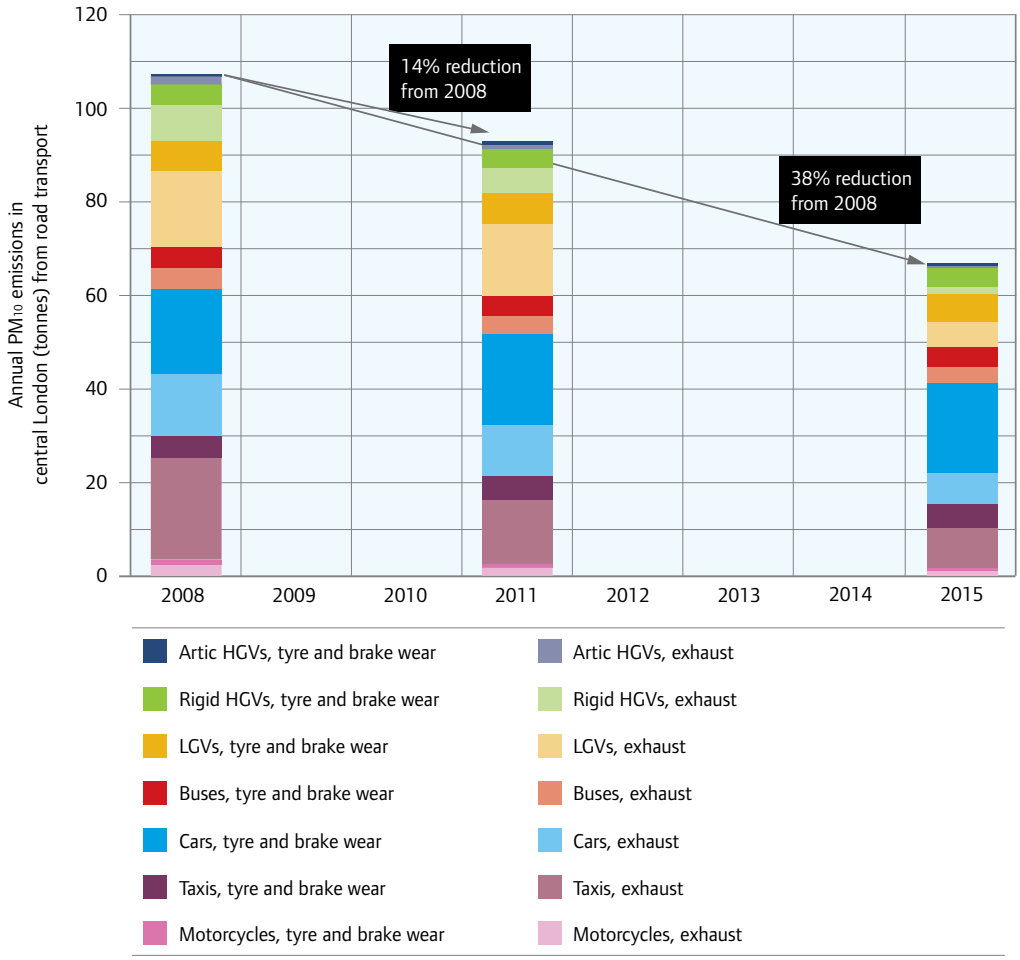
e) The Mayor will work with boroughs that propose to take local action to address air quality through local low emission zones or similar measures

581 Further steps will also be required to reduce emissions from other sources, such as commercial, industrial, construction and domestic sources. The Mayor's Air Quality Strategy considers air pollutant emissions from transport as part of the broader London context. More detailed proposals to address emissions and improve air quality will be included in this strategy.

5.21.8 Contribution to improved air quality

582 The Mayor's Transport and Air Quality Strategies will achieve significant reductions in emissions of air pollutants, especially from road transport. Overall, TfL estimates that, along with natural fleet turnover and existing measures, the proposed air quality measures in this and the Air Quality Strategy will deliver

Figure 60: Central London PM_{10} emissions in 2008, 2011 and 2015



around a 14 per cent reduction in central London road transport PM_{10} emissions in 2011, and a 58 per cent reduction in Greater London road transport NO_x emissions by 2015 (Figures 59 and 60).

Particulate matter

583 The measures laid out in this strategy increase the confidence that London will meet the EU limit values for PM_{10} in 2011.

584 While there remain a small number of areas in central London which have been identified as being at risk of exceeding the EU limit values, it is anticipated that targeted local measures (and, where necessary, special measures) should help to ensure that these areas meet the EU limit values.

NO_2

585 NO_2 is a national issue requiring further action from central Government. The Mayor's Air Quality Strategy includes policies for encouragement to be given to central Government and other organisations in developing a package of measure which together with the measures in this strategy will meet NO_2 limit values in London by 2015.