

2014 EDITION



# LONDON CYCLING DESIGN STANDARDS

MAYOR OF LONDON



**TRANSPORT  
FOR LONDON**  
EVERY JOURNEY MATTERS

# Contents

The London Cycling Design Standards (LCDS) sets out requirements and guidance for the design of cycle-friendly streets and spaces. It should be used by those who shape the environment through planning and street design as well as engineers designing cycle-specific infrastructure.

LCDS forms one part of TfL's Streetscape Toolkit, and should be read in conjunction with the other constituent documents:

- Streetscape Guidance
- London Pedestrian Design Guidance
- Accessible Bus Stop Design Guidance
- Kerbside Loading Guidance
- Station Public Realm Urban Design Guidance

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# 1. Design requirements

This chapter provides an introduction to the design standards and a summary of key requirements.



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## 1.1 Raising standards

### 1.1.1 Introduction

The Mayor has set out his vision for cycling and his aim to make London a ‘cyclised’ city. Building high quality infrastructure to transform the experience of cycling in our city and to get more people cycling is one of several components in making this happen. This means delivering to consistently higher standards across London, learning from the design of successful, well used cycling infrastructure and improving substantially on what has been done before. It means planning for growth in cycling and making better, safer streets and places for all.

Last published in 2005, the revised London Cycling Design Standards (LCDS) sets out the approach needed in London to deliver this



step-change in quality and to inform and reinforce borough plans and strategies for promoting cycling.

Now comprehensively updated to reflect established and emerging best practice, LCDS is a document that should shape design options and promote an integrated and ambitious approach to delivering high quality infrastructure for cycling in all parts of London.

### 1.1.2 Summary of requirements

LCDS identifies the design outcomes desired to deliver the ambitions of the The Mayor’s Vision for Cycling (2013), reflecting the Mayor’s Roads Task Force report, ‘The vision and direction for London’s streets and roads’ (2013). It requires that all infrastructure delivered through TfL-funded programmes applies the following:

- **Guiding principles**, which help clarify how the Mayor’s Vision for Cycling should be delivered
- **Levels of service**, which are ways of measuring the quality of design outcomes, both in terms of what they offer for cycling and what they contribute to places

The requirements for cycling infrastructure proposals delivered through the Mayor’s Vision for Cycling, are that they should:

1. Demonstrate how the guiding principles have been reflected in design decisions
- 2a. Deliver the appropriate strategic level of service based on place characteristics as outlined in the Roads Task Force street types approach
- 2b. Meet the minimum standard expressed in the Cycling Level of Service (CLOS) assessment, and any further programme- or project-specific requirements

### 1.1.3 Using LCDS

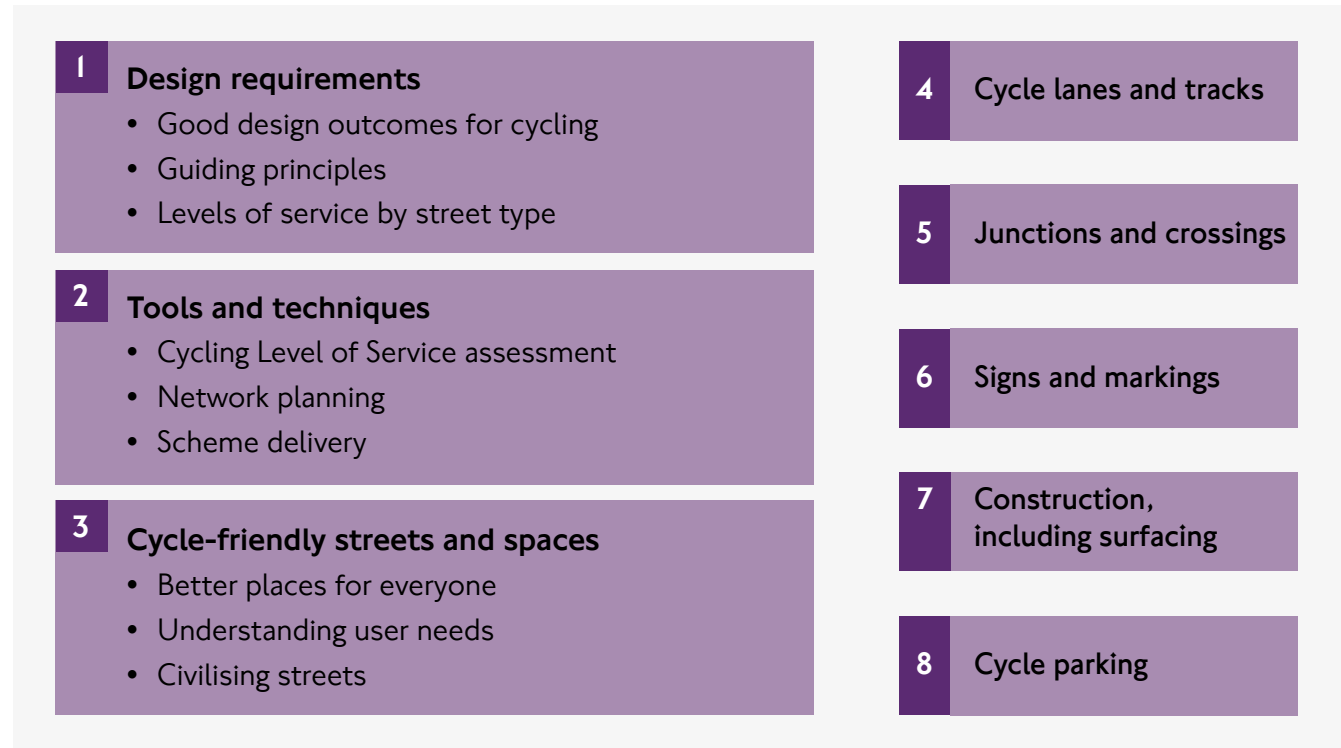
London aspires to be a great cycling city. The application of the guiding principles set out in this document and rigorous attention to achieving higher service levels as a result of new infrastructure are central to this. Street types and the CLoS assessment give the ability to set standards flexibly but consistently.

Those planning and delivering cycling infrastructure are encouraged through this guidance to be bolder, to commit to making better, more attractive streets and spaces for cycling and walking and to experiment with temporary measures where necessary to prove that change is achievable.

The overall aim is to plan and deliver a London-wide network for cycling that meets with aspirations for infrastructure that is safe, comfortable, direct, coherent, attractive and adaptable.

LCDS consists of comprehensive guidance to support meeting those aspirations, and should be read and understood by all those involved in the design of infrastructure for cycling, including not only highway planners and engineers but all those who help shape the street environment. While it carries no legal obligation, any decision to depart from its advice should be accompanied by a reasoned justification for doing so and should be discussed and agreed with the relevant highway authority.

Figure 1.1 Structure of London Cycling Design Standards



### 1.1.4 Document structure

The first two chapters of LCDS cover general design requirements and techniques for planning and delivering high quality infrastructure. The procedures set out here should be applied in a way that is consistent and proportionate with the scale of intervention proposed. They are intended to help deliver the desired outcomes

efficiently and to a high standard, rather than place unnecessary burdens on designers.

Chapter three covers user requirements for any place, and how those needs may be balanced to create civilised streets and better places for everyone. The remaining five chapters of LCDS consist of detailed design guidance to support the requirements and principles set out in chapter one.

## 1.1.5 Design outcomes

The six core design outcomes, which together describe what good design for cycling should achieve, are: Safety, Directness, Comfort, Coherence, Attractiveness and Adaptability.

These are based on international best practice and on an emerging consensus in London about aspects of that practice that we should adopt in the UK. They are important not just for cyclists but for all users of streets, public spaces, parks and watersides, where investment in cycling has the potential to improve the quality of place.

These design outcomes, illustrated in figure 1.2, contribute to broader concepts of placemaking, in particular the principles of good design set out in National Planning Practice Guidance (2013) and local design guidance such as TfL's Streetscape Guidance.

The future must not be like the past. Even infrastructure designed with good intentions in mind can fail to provide a good level of service to cyclists, as the examples in figure 1.2 show.

Success will be measured by the quality of design outcomes. Improvement therefore needs to be focused on the cycling experience: how safe and comfortable it feels, how direct and attractive a journey is to cycle, and whether cycle routes are coherent and easy-to-follow.

Figure 1.2a Good design outcomes 1-3

### 1 - Safety



Good infrastructure should help to make cycling safer and address negative perceptions about safety, particularly when it comes to moving through junctions.



Space for cycling is important but a narrow advisory cycle lane next to a narrow general traffic lane and guard-rail at a busy junction is not an acceptable offer for cyclists.

### 2 - Directness



Routes must be logical and continuous, without unnecessary obstacles, delays and diversions, and planned holistically as part of a network.



This track works well on links but requires cyclists to give way at each side road. Cyclists often choose to stay on carriageway rather than take fragmented routes with built-in delay.

### 3 - Comfort



Riding surfaces for cycling, and transitions from one area to another, should be fit for purpose, smooth, well constructed and well maintained.



Uncomfortable transitions between on-and off-carriageway facilities are best avoided, particularly at locations where conflict with other road users is more likely.



Figure 1.2b Good design outcomes 4-6

**4 - Coherence**

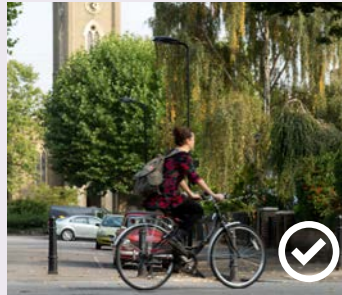


Infrastructure should be legible, intuitive, consistent, joined-up and inclusive. It should be usable and understandable by all users.



Neither cyclists nor pedestrians benefit from unintuitive arrangements that put cyclists in unexpected places away from the carriageway.

**5 - Attractiveness**



Infrastructure should not be ugly or add unnecessarily to street clutter. Well designed cycling infrastructure should enhance the urban realm.



Sometimes well-intentioned signs and markings for cycling are not only difficult and uncomfortable to use, but are also unattractive additions to the streetscape.

**6 - Adaptability**



Cycling infrastructure should be designed to accommodate users of all types of cycle, and an increasing numbers of users over time.



Where streets have been engineered primarily for use by motor vehicles, it is difficult to make infrastructure for cycling that is legible and adaptable.

**1.1.6 Guiding principles**

It will take consistent commitment to the quality and ambition of cycling infrastructure design to realise The Mayor’s Vision for Cycling. The 20 guiding principles set out below are fundamental to that approach. Working through them can help practitioners to understand what it will take to deliver the Mayor’s Vision. They are geared towards learning from what has been done well in the past and tackling the reasons why many previous attempts to deliver good cycling infrastructure have fallen short.

**REQUIREMENT 1:**

Consideration of the guiding principles should shape the design of any infrastructure delivered as part of the Mayor’s Vision for Cycling. How they are applied will depend on site-specific conditions and on detailed design, but schemes should demonstrate that these issues have been taken seriously and have informed design decisions.

## 1. Cycling is now mass transport and must be treated as such

Most current cycle provision is squeezed into spare space or on the margins of roads. It reflects a belief, conscious or otherwise, that hardly anyone cycles, that cycling is unimportant and that cycles must take no meaningful space from more important road users, such as motor vehicles and pedestrians.

This no longer applies, especially in the centre. TfL's April 2013 cycling census found that 24 per cent of all rush-hour traffic in central London is cycles, and 16 per cent across the entire day, with shares of up to 64 per cent on some main roads. Similar shares apply in inner London.

New cycle facilities must be designed to cope not just with these existing levels of use, but with the future we are planning: of further increases in cycling in zones 1 and 2, and of existing inner-city cycling levels starting to spread to the suburbs.





## 2. Facilities must be designed for larger numbers of users

In an era of mass cycling, facilities designed for minimal cycling will not work.

Hundreds of cyclists an hour will be using many of the busier main road cycle tracks – sometimes already are. Tracks should ideally be 2 metres wide in each direction (4 metres for bidirectional tracks) to allow room to overtake. If this is not possible, faster cyclists will ignore them. This should be the rule, though there will have to be some exceptions.

People will cycle in growing numbers, whether other road users want them to or not. The only issue is whether we cater for them effectively – reducing the potential for conflict with others – or ineffectively.

## 3. Cycles must be treated as vehicles, not as pedestrians

Cyclists and pedestrians should not be forced together where there is space to keep them apart, creating unnecessary conflict which can only increase as the number of cyclists rises.

We have a strong preference against schemes requiring cyclists and pedestrians to share the same highway space, wherever they can be avoided. It will be necessary to use some shared areas in our cycle routes, particularly where

the space is wide, but we will prefer to create delineated cycle tracks across it, perhaps with sloping, pedestrian-friendly kerbs or different surfacing.

Cyclists and pedestrians should not share the same space at crossings and junctions. Clearly-delineated separate and/or parallel routes should be provided for cyclists and pedestrians. Typical bad cycle design deals with junctions by making cyclists pretend to be pedestrians, bringing them on to the pavement and having them cross the road, often in several stages, on toucan crossings.



#### 4. Cyclists need space separated from volume motor traffic

There are three ways of achieving this: full kerb segregation, semi-segregation and lower-traffic streets. Full kerb segregation is important and a major part of our plans. Most main roads in London are, however, also bus routes with frequent stops. The cycle lane would have to go between the bus and the pavement. Everybody getting off or on a bus would have to step straight into the lane, which would raise safety concerns both for bus passengers and cyclists. On bus routes where there is room, we will install segregated lanes with 'floating' bus stops on 'islands' in the carriageway to avoid bus passengers having to step straight off into the cycle lane. Where there is not room, we will use alternative forms of separation.

#### 5. Where full segregation is not possible, semi-segregation may be the answer

Semi-segregation can take a number of forms, described in this document: wider shared bus and bike lanes, better separated from the traffic with means such as traffic wands in the roads, or mandatory cycle lanes, separated with traffic wands. We want to follow the example of US cities in using simpler, more flexible and cheaper forms of separation.



#### 6. Separation can also be achieved by using lower-traffic streets.

Routes should make more use of secondary roads, where they are sufficiently direct, to separate cyclists from volume traffic. A cross-London network of high-quality guided 'Quietways' will be created on lower-traffic back streets. Nor is there any rule that Superhighways need be on the busiest main roads; one of the most successful current routes, CS3 in inner east London, is not. We will also mix the two, with stretches on back streets joined to segregated stretches on the main road and across junctions where there is no sufficiently direct side street.

#### 7. Where integration with other road users is necessary, differences of speed, volume and vehicle type should be minimised

In the Dutch principles of sustainable safety, this idea is expressed as the 'homogeneity' of mass, speed and direction.



## 8. Cyclist interventions need not be attempted on every road

We have no intention of preventing cyclists from using any road, save motorways. But some busy, narrow main roads can never be made truly safe for cyclists, and there is little point trying if better alternative roads exist. In locations where a number of roads run parallel, consider designating different roads for different users.



## 9. Routes must flow

Routes must feel direct and logical. Users should not feel as if they are having to double back on themselves, or go the long way round. Unnecessary small obstacles and diversions should be removed. Chicanes and 'cyclist dismount' signs must be avoided. Currently, many routes appear deliberately designed to break the flow.

## 10. Routes must be intuitively understandable by all users

Cyclists – and other road users – must be in no doubt where the cycle route runs and where each different kind of user is supposed to be. This is partly about waymarking, which must be frequent, clear and reassuring, guiding users at every decision point and at some points in-between.

It is more, however, about design. Ambiguous or confusing designs, such as shared use footways, schemes where the cycle route disappears, or schemes which funnel cyclists unexpectedly into the path of other traffic, should be avoided.

## 11. Provision must be consistent and routes must be planned as a network

The worst routes tend to be the result of small, piecemeal interventions made in an unconnected way. Ideally, schemes should be designed on a whole-route basis, integrated with what you want to do for all users on the street. Even without this, strenuous efforts should be made to avoid inconsistent provision, such as a track going from the road to the pavement and then back on to the road, or a track which suddenly vanishes.

Cycle facilities must join together, or join other things together. Routes should be planned holistically as part of a network. Isolated stretches of route are of little value.

## 12. Routes and schemes must take account of how users actually behave. If they do not, they will be ignored

They should respect people's wishes to take the most direct route. There is little point, for instance, in designing a cycle route through a road junction that requires cyclists to perform convoluted movements or wait at multiple sets of crossings. If you do, they will simply carry on using the motor traffic route. There is little point in a route which takes cyclists too far out of the way to be useful.

The 'Cyclists dismount' sign is the infallible mark of a faulty cycle route. No-one wants to get off and walk. Either the sign will be disobeyed, or the route will simply not be used. If a route cannot be done without these signs, it should not be done at all.



### 13. Many of the standard tools currently used to manage cyclists' interactions with others do not work

Chicanes and the like restrict the usefulness and capacity of a route, block the passage of some types of bicycle, especially those used by disabled cyclists, and create unnecessary conflict with other users funnelled into the same small space. We certainly do not say that schemes should not tackle anti-social behaviour by cyclists, which annoys and frightens many people. But they must do so in ways more likely to succeed and to work for all parties.

### 14. Changes in road space can influence modal choice

Supply influences demand. Changing road space allocation can impact on modal choice, as is clear from the experience of bus lanes in London. Within the framework provided by the Roads Task Force street types, the network and route planning process should identify where the most benefit is to be gained from reallocating road space. This will help encourage more journeys by cycle and support planning for growing numbers of cycle users.

### 15. Trials can help achieve change

If there is dispute about the impact of a road change, we recommend trialling it with temporary materials. If it works, you can build

it more permanently. If it does not, you can easily and quickly remove or change it. However, it is important that the scheme is got right at the beginning, to maximise the chances that it works.

### 16. Avoid over-complication and the 'materials trap'

Many UK road and public realm schemes, not just in cycling, waste large sums on over-specified but essentially cosmetic alterations. Cycling interventions need not be heavily engineered and costly. A lot of the best are simple and cheap – such as, for instance, using a small number of bollards to create an entire cycle-only space.

The amount of work on a route should be proportionate to the level of intervention proposed. There is no need to treat a light-touch backstreet route with the same level of design, consultation and intervention as a Superhighway on a busy main road.

### 17. But do not be afraid of capital infrastructure

Sometimes, investing in more substantial infrastructure is the only way to overcome a major barrier. This can make or break a route, so it is well worth exploring the value that a bridge or a tunnel, for example, might add to a route.



### 18. All designers of cycle schemes must experience the roads on a cycle

Ideally, all schemes would be designed by people who cycle regularly. But at a minimum, anyone who designs a scheme must travel through the area on a cycle to see how it feels. We strongly recommend that designers and engineers also try cycling on some existing facilities, to understand why they do or do not work.



### 19. As important as building a route itself is maintaining it properly afterwards

Road markings get dug up by utility contractors, ignored in repaints or just worn away; tarmac is allowed to crack and part; tracks and lanes are seldom or never swept, leaving them scattered with debris and broken glass. In winter, cycle lanes are usually the last place on the road or pavement to be cleared of snow and ice, if they are cleared at all. All lanes must be properly maintained and swept frequently for debris and broken glass. Route proposals must include a maintenance plan.

### 20. Know when to break these principles

Ideally, routes will be uninterruptedly excellent. In practice, where it is absolutely unavoidable, we will accept a short stretch of less good provision rather than jettison an entire route which is otherwise good. But we expect that this will be rare.



## 1.2 Levels of service for cycling

### 1.2.1 Responding to context

The design outcomes articulated in this document do not come in the form of 'cut-and-paste' layouts.

The focus in delivering the Mayor's Vision for Cycling should be on the quality of the infrastructure delivered. This needs to be informed primarily by the context and by sensitivity to end users' needs.

Two measures have been developed to define what a good level of service for cyclists means in practice. These articulate both a strategic and a local level of service.

### 1.2.2 Street types

The first measure focuses on place characteristics and arises from the Roads Task Force. This has established a framework of nine street types (see figure 1.3) designated according to the relative significance of movement and place within an area. 'Movement' is defined in terms of people (and goods), not vehicles, whereas 'place' captures activities on the highway and the relationship with frontages adjacent to the street.

The adoption of street types across neighbouring highway authorities will play an important role in providing a unified view on where best to apply different measures.

Figure 1.3 Cycling infrastructure that may typically feature in each street type





At a strategic level, street types serve in this guidance as a way of highlighting the place function of a street alongside its movement function. As outlined in section 4.1.4, place and users are the primary consideration – cycle-friendly interventions should not be dictated by the speed and volume of traffic alone.

Street types can therefore be used to frame improvements to support cycling and help determine the strategic level of service required, alongside other detailed place and user considerations.

**REQUIREMENT 2a:**

Proposals for interventions to support cycling should refer to the RTF street types. They should demonstrate that the provision made for cycling is appropriate for the place and its users, referring where necessary to the indicative ranges set out in figure 1.4.

**Development of the street type methodology**

Street types classify the function of a location on the highway. A street’s performance can be improved by implementing measures to better meet its functional requirement.

In locations with a higher place function, such as a town square, scheme design might focus on how cycling can help to bring people into a space to dwell and how general traffic might be calmed to

make the place more inviting still. This might be more important for local high streets and squares than for city streets and city places, where levels of pedestrian activity are likely to be high.

Where through-movement is dominant, design for cycling should address capacity and safety issues such as cycle priority, avoidance of delay and managing conflict with motorised vehicles.

TfL is developing a process that encourages agreement on street types with all relevant stakeholders. This process will be repeatable, consistent and transparent and involve officers from highway, planning and development control departments. A single view of the network will be approved by appropriate representatives for the

highway authority and relevant London Council Committee members. Once approved, street types will be mapped and available for reference.

**Interventions for cycling**

In figure 1.4, types of cycling intervention are categorised according to the ‘degree of separation’ they offer between cyclists and motor vehicles. Where the street has a higher movement function, improved level of service for cyclists can be achieved by greater user separation and by traffic calming measures. Further detail and guidance on degree of separation and different types of appropriate cycling provision are provided in chapter 4.

Figure 1.4 Indicative range of cycling interventions by RTF street type

	Low place function			Medium place function			High place function		
Degree of separation (between cyclists and motorised vehicles)	Arterial road	Connector	Local street	High road	High street	Town square	City hub	City street	City place
<b>A. Full separation on links</b> (eg cycle track, segregated lane)	●	●		●					
<b>B. Dedicated on-carriageway lanes</b> (eg mandatory or light segregated lanes)		●		●	●		●	●	
<b>C. Shared on-carriageway lanes</b> (eg advisory lanes, bus/cycle lanes)		●	●	●	●	●	●	●	
<b>D. Integration with other vehicles</b>			●		●	●	●	●	●

While it is important to ensure that cycle intervention is appropriate for the street type, it is also important to provide continuity for cyclists along a route. A strategic overview of a route is required to ensure cycling provision is seamless across street type boundaries.



Mandatory cycle lane on a 'connector'

### 1.2.3 Cycling Level of Service assessment

The second level of service measure for cycling operates at a more detailed level. A Cycling Level of Service (CLoS) assessment has been developed in order to set a standard for the performance of cycling infrastructure for routes and schemes, and for individual junctions. The assessment is described in full in section 2.2.3. Its purpose is to frame discussion about design options so that schemes are appealing for existing cyclists and can entice new cyclists onto the network. It may be used on any scheme that has an impact on the street environment.

The assessment also provides an argument for how improvements for cycling could be made in stages, trialling new layouts or different forms



Staged improvements for cycling at Palatine Road, Hackney

### REQUIREMENT 2b:

The CLoS assessment describes a level of service that all schemes should meet. This is based on existing policies and good design practice. Falling below the minimum standard on the critical factors triggers the need for reassessment of the scheme.

of traffic management when it may be difficult to make the case for a permanent change. A closure to motorised vehicles, allowing filtered permeability for cyclists, may be a first stage of longer-term area improvements, making streets better, safer places for all. The first stage represents one intermediate level of service, the second a higher level.





## 1.3 Applying LCDS

### 1.3.1 Delivering high quality infrastructure

The test of success will be whether the infrastructure that is delivered is high quality and fit-for-purpose when built. It should achieve the six design outcomes – safe, direct, comfortable, coherent, attractive and adaptable – and be shown to attain the levels of service outlined in the previous section. This high standard will apply to the delivery programmes set in motion by the Mayor's Vision for Cycling and described in this section.

### Barclays Cycle Superhighways

Superhighways are cycle routes running from outer London into central London. They enable safer, faster and more direct cycle journeys into the city. Four have launched, including an extension of CS2 in November 2013, and a number of new routes are planned for opening by 2016.

The aim of Superhighways is to improve cycling conditions for people who already commute by cycle, and to encourage new cyclists, thereby contributing to the growth set out in the Mayor's Vision for Cycling.



Full segregation on CS2 extension

The Superhighways will be delivered to high standards. With the proviso that nothing must reduce cyclists' right to use any road, segregation will be favoured. Where it is not possible to separate with kerbs and where justified by traffic conditions, light segregation and wide, mandatory cycle lanes will be considered. Tackling junctions to provide safer and more comfortable conditions for cyclists is a priority, separating cyclists from other traffic in time and space.



Visualisation of the North-South route

### Mini-Hollands

The three outer London Mini-Hollands will see cycling interventions that will transform Enfield, Kingston-upon-Thames and Waltham Forest, and benefit other town centres as areas with exemplar facilities for cyclists. This will result in an uplift in safe cycling associated with excellent cycle facilities and public realm provision. The emphasis is on transformational infrastructure measures, and the programme is specifically targeted at capturing the potential for journeys by cycle to replace many journeys currently undertaken by private car.

## Quietways

Quietways will complement Superhighways by providing a network of cycling routes through less heavily trafficked streets in every London borough, joining up with off-carriageway routes where possible. Quietways will be direct, easy to follow and will be delivered end-to-end, not piecemeal. They are not principally aimed at existing fast, confident cyclists. They are aimed at new cyclists who want a safe, unthreatening experience.

Quietways will mostly be radial, from central London to the suburbs, with some orbital routes. They will be continuous, following cyclists' desire lines. The vast majority will be on more lightly trafficked back streets, with some on canal towpaths or paths across parks and open spaces. At some points, for the sake of directness, Quietways may need to join main roads, but this should be kept as brief as possible. Where they have to join busier roads, or pass through busy, complicated junctions, segregation should be provided.

Quietways are low-intervention routes on links, with largely unsegregated cycling provision because they are on quieter streets. The main interventions on the vast majority of the network will be direction signing, surfacing improvements, removing barriers such as chicanes and improving the flow of the route. There may need to be some removal of parking, but this should be kept to a minimum.

The Greenway and Quietway programmes have been merged. Many Greenways, both existing and those now being delivered, will be used as part of the Quietway network. But not all Quietways will be Greenways – the majority of Quietways will be normal streets, not parks or canal towpaths.

Key principles for Quietways are as follows:

- Routes should be on the quietest available roads consistent with directness
- Routes should be as straight and direct as possible
- Routes should try to avoid unnecessary turns
- At some points, for the sake of directness, Quietways may need to join main roads, but this should be as brief as possible; where they have to join busier roads, or pass through busy, complicated junctions, segregation must be provided
- Routes should use the same road in both directions unless it is absolutely unavoidable; one-way streets should be made two-way for cyclists where this is possible
- Right turns in traffic, which require cyclists to filter into the middle of other vehicles, should be avoided wherever possible; right turns on quiet roads are acceptable
- Right turns which require cyclists to filter in busy traffic should always be avoided; if it is unavoidable, a short stretch of segregation or other road rearrangement should be provided

- Wayfinding will largely be on-carriageway, though signs will be necessary at some junctions
- Routes need to operate full-time; where routes are through parks that are closed at night, then an acceptable and sufficiently direct alternative night route, on similarly quiet roads, will need to be well signposted
- Partners should consider 'social safety' as a central and integral part of Quietway design and delivery; lighting and CCTV should be improved where necessary

## Better Junctions

The Mayor's Vision for Cycling includes a revised Better Junctions programme. Reflecting the commitment to make London's busiest junctions safer and more attractive for cyclists and other vulnerable road users, this will involve substantial improvements to 33 junctions across London. This includes locations on existing and proposed Cycle Superhighways.

## Other programmes

Improvements to infrastructure that can help support cycling are also made through the existing TLRN Regional Improvement Programme schemes undertaken by TfL and through Local Implementation Plan (LIP) schemes led by the boroughs and cities.

### 1.3.2 Trialling and innovation

This document also considers innovations currently being trialled, or planned for trial. These practices are not yet established but have great potential to broaden significantly the options we have for designing high quality infrastructure for cycling in the future. They include:

- Dedicated traffic signal infrastructure for cyclists; potential applications of low-level signals are described in section 5.4.3
- Continuous and intermittent forms of separation of cyclists from motor vehicles on links; content on kerb segregated and light segregated cycling facilities is provided in section 4.2



- Different ways of managing kerbside activity, including ‘floating’ parking, loading and bus stops on the offside of cycle lanes/tracks; sections 3.2, 4.2.6 and 4.3.10 cover these areas
- Ways of helping cyclists turn right from the nearside, without having to turn across lanes of moving motor traffic; two-stage right turns are described in section 5.4.7

### 1.3.3 Legal and policy context

Current policy on cycling in London is driven by the The Mayor’s Vision for Cycling (2013) and by the Mayor’s Transport Strategy (2010). The latter sets a target for increasing the mode share for cycling to 5 per cent of all journeys by 2026. This will represent a 400 per cent increase since 2001.

Figure 1.5 sets out other important documents that form the policy and strategy context for cycling infrastructure, as well as key legal and regulatory considerations. These should be applied in conjunction not only with LCDS but also local plans and relevant guidance, standards and strategies produced by the London boroughs and the Cities of London and Westminster.

In August 2013, the Prime Minister announced his ambition to increase cycling in England from 2-3 per cent of trips in England towards the levels achieved in certain other European countries. To achieve this, he challenged local authorities to raise the bar in designing and delivering cycle-friendly infrastructure to encourage many more people to try cycling.

As part of the same announcement, it was indicated that the Department for Transport may endorse the LCDS as good practice guidance for use by highway engineers across England.

The Network Management Duty requires local traffic authorities to manage their networks with a view to securing the expeditious movement of traffic on the authority’s road network and facilitating the same for road networks for which the other authority is the traffic authority (so far as may be reasonably practicable having regard to their other obligations, policies and objectives). In this instance, ‘traffic’ is explicitly defined as including pedestrians, cyclists and motorised vehicles.

Figure 1.5 Selected legal and policy context for cycling in London

Relevant policy context	Key aspects of legal and regulatory context
<p><b>London-wide</b></p> <ul style="list-style-type: none"> <li>• Mayor’s Vision for Cycling (2013)</li> <li>• The London Plan (2011) and draft Further Alterations (2014)</li> <li>• Transport action plan: improving the health of Londoners (2014)</li> <li>• Accessible London: achieving an inclusive environment SPG (2014)</li> <li>• Cycle Safety Action Plan (2014)</li> <li>• Roads Task Force report, ‘The vision and direction for London’s streets and roads’ (2013)</li> <li>• Mayor’s Transport Strategy (2010)</li> <li>• Cycle Security Plan (2010)</li> <li>• Clearing London’s Air (2010), the Mayor’s strategy for improving air quality</li> <li>• Tree and Woodland Framework for London (2005)</li> </ul>	<p><b>TSRGD</b> The Traffic Signs Regulations and General Directions (2016) set regulatory requirements for signs and road markings.</p> <p><b>Highways Act (1980)</b> This Act places a statutory obligation on highway authorities to provide for the safe movement of people and goods.</p> <p><b>Traffic Management Act (2004)</b> This gives additional responsibilities to local traffic authorities, particularly in relation to planning and co-ordination of works. It also places the Network Management Duty on local authorities.</p> <p><b>Health and Social Care Act (2012)</b> This shifts more responsibilities onto local authorities and enables more direct links between health outcomes and local policies in areas such as transport.</p> <p><b>Crime and Disorder Act (2006)</b> Section 17 places a general responsibility on local authorities to design out crime and to take account of community safety plans.</p> <p><b>Equality Act (2010)</b></p> <p><b>Construction Design and Management regulations (2007)</b> CDM sets out the need for practitioners to be adequately trained for the work they are doing.</p>
<p><b>National</b></p> <ul style="list-style-type: none"> <li>• National Planning Practice Guidance (2013)</li> <li>• All Party Parliamentary Cycling Group (APPCG), Get Britain Cycling (2013)</li> <li>• Local Transport Note LTN 2/08: Cycle Infrastructure Design (2008)</li> <li>• Manual for Streets (2007) and Manual for Streets 2 (2010)</li> </ul>	



## Inclusive design and the Equality Act

The Equality Act (2010) requires authorities to make reasonable adjustments to remove barriers for disabled people. This applies to the street environment and to public transport services and covers disabled cyclists as well as pedestrians.

Cycles are often used as mobility aids or are used in combination with other mobility aids. Some disabled cyclists use non-standard cycles; some do not, but are not able to walk or carry

their cycle, balance without support when static or dismount in a small space. Inclusive cycling design needs to be built into all schemes catering for all, from novices to long-distance cyclists.

Public bodies also have a legal obligation under the Equality Act (2010) to have due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it. In terms of this guidance, this means pursuing

inclusive design for all streets and spaces, ensuring that everyone using these environments should be able to participate independently in everyday activities with confidence.

Where proposed interventions raise concerns about the impact on equality of opportunity, early engagement with relevant user groups and preparation of an Equality Impact Assessment (EqIA) are recommended.



Recumbent cycle user

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