

Lee Valley Regional Park Cycling Strategy

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Lee Valley Regional Park Authority



Prepared by:

Steer Davies Gleave
28-32 Upper Ground
London SE1 9PD
+44 20 7910 5000
www.steerdaviesgleave.com

Prepared for:

Lee Valley Regional Park Authority
Myddelton House
Bulls Cross
Enfield EN2 9HG

Executive Summary

Introduction

The Lee Valley Regional Park (the Park) provides a 26 mile spine of green space through north east London from Ware in Hertfordshire to East India Dock Basin on the River Thames. It attracts in excess of six million visitors per year, including many cyclists who come to use existing routes or visit attractions such as the Lee Valley VeloPark.

This document outlines how the Lee Valley Regional Park Authority (LVRPA) can build upon the existing good facilities for cyclists, remedy issues and barriers and provide a more joined-up offer to cyclists. Improving its cycling offer has the potential to increase visitor numbers, bring in more revenue for the Park's visitor attractions and improve the health and wellbeing of those visitors.

Policy context

This strategy sits within a national context of support for active leisure and active travel. The Department for Transport's goal is for walking and cycling to be the natural choice for short everyday trips, while the Department for Health see increasing physical activity as a core element in tackling childhood obesity.

On a regional level, the Mayor of London is promoting cycling as a means of transport through increased funding, and cycling numbers are

increasing across London. More closely to the Lee Valley, the 2012 Olympics has left a legacy of sports facilities and participation.

At the local scale, eight local transport authorities border the Park. Each has specific plans for cycling that they are bringing forward and we have engaged with each throughout the development of this strategy. Working closely in partnership with these neighbouring boroughs as well as other local partners such as Canal & River Trust (C&RT) and Sustrans, will be a core component in the delivery of this strategy.

Vision

Our vision is for the Lee Valley Regional Park to be a world class destination for cycling

Objectives of this strategy

1. Improve access to the Park for people who want to cycle there (i.e. help people to get there by bike).
2. Improve access within the Park for people cycling: make it easy for people to cycle around the park.
3. Improve awareness of the Park's cycling offer, particularly among residents of neighbouring boroughs and capitalise on the success of and interest generated by the Lee Valley VeloPark and the range of cycling events that take place.

4. For the Park to be accessible to all (i.e. so that disabled people can also enjoy cycling in the Park).
5. Promote safety and security among those cycling and walking in the Park.

Existing conditions for cycling in the Park

The Lee Valley Regional Park already has a strong cycling offer. The existing cycle network includes National Cycle Network routes 1 and 61, as well as many other local cycle routes. Paths in the Park tend to be well-surfaced and of sufficient width for two cyclists to pass, although there are some reports of minor pedestrian - cyclist conflict. Many cyclists come to the Park for leisure rides or to visit one of the Park's attractions such as the Lee Valley Velopark or White Water Centre. There are also some cyclists who commute through the Park. It is possible to travel with a bicycle on one of the trains on the parallel railway line to the Park.

Issues and opportunities

While there are many strengths to the existing offer for cyclists in the Park, there are outstanding issues and barriers:

- **Physical barriers to accessing the Park.** The West Anglia railway line, major roads, and industrial, trading and housing estates restrict the number of access points into the Park.
- **Informational barriers to accessing the Park.** A lack of awareness of the Park's facilities or access points for cyclists can be a barrier to use.
- **Missing cycling connections.** Sections of the cycling network are incomplete or there are no alternative routes.
- **Barriers to movement within the Park.** Metal barriers, cobbled speed traps, steps, encroaching vegetation or narrow pinch points can impede movement within the Park.
- **Signage and wayfinding.** While there is some signage in the Park, in places it is not comprehensive enough to be relied on for route finding.
- **Lighting preventing night time or winter use.** Almost none of the paths in the Park have artificial lighting, which makes their use after dark difficult.

Measures to develop the cycling offer in the Park

This section sets out what we will do to encourage and promote cycling in the park:

1. **Develop key gateways to the Park.** We have identified a set of key gateways to improve the quality of access points into and out of the Park. Key gateways will be characterised by clear access and good quality wayfinding.
2. **Remove physical barriers to access.** We shall work with partners to create ramped access across the railway line, major roads and through estates, which currently hamper access to the Park.
3. **Raise the profile of cycling in the Park.** We shall increase awareness of the Park's cycling offer through advertising and publicity, particularly focussed on neighbouring residential areas and new developments near to the Park, as well as events at the Lee Valley VeloPark to raise the profile of cycling.
4. **Improve signage and wayfinding.** Working closely with partners such as C&RT, Sustrans and neighbouring boroughs, we shall develop more comprehensive, consistent wayfinding.
5. **Introduce new routes to develop the existing network.** We shall create a more complete cycle network by completing missing cycling connections and providing alternative routes through and across the Regional Park for cyclists.
6. **Improve the quality of paths for cycling.** We will address specific barriers to cycling within the Park and assure the implementation of cycle routes that conform to good practice and cater for future increases in demand.
7. **Encourage considerate sharing of paths.** To continue efforts to minimise conflict, we will work closely with C&RT to implement awareness-raising campaigns.
8. **Develop cycle parking and hubs.** We will increase the provision of cycle parking at key visitors attractions and gateways, as well as supporting the development of cycle hubs by neighbouring boroughs.
9. **Explore options for cycle hire.** We shall explore options for further cycle hire locations in the Park.

In order to realise the measures outlined in the previous section the LVRPA, working with partners, shall seek funding from various sources including but not limited to:

Department for Transport grant funding (outside London)

- Local Growth Fund (capital schemes)
- Access Fund (revenue funding)
- Cycle-Rail funding in conjunction with rail operators
- Potential future funding announced from DfT related to the Cycling and Walking Investment Strategy

Transport for London funding (London)

- Cycle Superhighway / Quietway programmes
- Mini-Hollands

Local Authority / London Borough funding

- Local Implementation Plan (LIP via TfL)
- Developer contributions (Section 106 / Community Infrastructure Levy)

Sporting / leisure sources:

- Sport England
- Big Lottery Fund



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1

Introduction

About the Lee Valley Regional Park

Created 50 years ago on the 1st January 1967, the Lee Valley Regional Park (the Park) provides a spine of green space through north east London. It covers 26 miles of parkland from Ware in Hertfordshire to East India Dock Basin on the River Thames. The park includes over 4,000 hectares of park and marshland, sport and leisure venues, nature reserves and trails.

The Lee Valley Regional Park Authority's vision is for the park to be "a world class leisure destination: at the heart of this, we are a place for recreation, leisure, sport and nature".

The Park attracts in excess of six million visitors a year, having risen from around four million 10 years ago. Visitor numbers are forecast to increase further – seven million expected by 2020. Visitors come to visit the high quality leisure and sporting sites such as the Lee Valley White Water Centre, the VeloPark and Ice Centre. They come to escape the city in the extensive green space. They run after work or play football on the weekend. They walk along the river and in neighbouring woodland. They experience local nature and wildlife. They come to enjoy a family afternoon out.

The Park already has many cyclists who visit the park throughout the year. Some come to ride along the north-south National Cycle Route 1, which runs the length of the UK, including much of the length of the Park, whether on a day ride or as part of a longer tour. Some come to visit the world-class Olympic legacy venue – the Lee Valley VeloPark – which offers a velodrome, BMX track, road circuit and mountain biking as well as indoor static bikes and children's balance bikes. Some ride through every day to and from their place of work, perhaps along the towpath of the Lee Valley Navigation Canal offering a direct traffic-free route into and out of inner London. Some come to ride circular traffic-free routes with their children, taking advantage of one of the many suggested routes.

Why a cycling strategy for the Lee Valley Regional Park?

Cycling is already a popular activity and attraction for many of the visitors to the Park. There are already cycling routes in the Park, the absence of traffic attracts cyclists from nearby roads and there are many leisure venues to which (and at which) visitors cycle. However, there are barriers to cycling in the Park, and more could be done to attract more cyclists.

This document outlines how the Lee Valley Regional Park Authority (LVRPA) can build upon the existing good facilities for cyclists, remedy issues and barriers that exist and provide a more joined-up offer to cyclists. It sets out the LVRPA's plans for cyclists going forward, the schemes that the LVRPA will promote and bring forward, and how it will integrate its schemes with the plans of neighbouring boroughs.

This strategy will identify ways to increase the attractiveness of cycling in the Park, it will look for ways to make cycling to access the Park easier, and it will look to improve cycling links between venues.

Improving the cycling offer of the Park will bring more visitors into the Park, increasing the number of people who benefit from its spaces and facilities. It also has the potential to bring in more revenue for the Park's facilities. In addition, making cycling more attractive in the Park has the potential to contribute to improving the health of residents of adjacent boroughs and visitors alike through increased levels of physical activity, reduced pollution, improved air quality and lower levels of congestion.



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Policy context

This section situates the Lee Valley Regional Park's Cycling Strategy in the national, regional and local policy context. It starts by introducing relevant national policy relating to active travel and health before discussing trends in cycling policy in London. The Park borders eight local transport authorities, the plans and collaboration of which are relevant to the development of cycling in the Park. This section reviews their local policies and strategies for cycling as these provide context for how cycling is promoted and encouraged locally.

National active travel and health strategy

Encouraging more people to cycle for leisure and for transport fits into several of the national government's objectives for transport and health. The Department for Transport (DfT) published its draft Cycling and Walking Investment Strategy for consultation in spring 2016. This document sets out the government's approach for investing to improve conditions for walking and cycling in the coming years. It sets out the DfT's commitment to making England a walking and cycling nation:

"Our long term goal up to 2040 is that walking and cycling should be a normal part of everyday life, and the natural choice for shorter journeys such as the commute to school, college, work or leisure trips."

The DfT believes that to realise this goal will require sustained investment in infrastructure coupled with a change in the approach to transport planning that sees cycling and walking as transport modes in their own right, integrated into the transport network.

The Department for Culture, Media and Sport (DCMS) published its New Strategy for Sport for consultation in summer 2015. This document is structured around several key themes relating to sport, of which two relate to cycling in the Park:

- **Participation:** the first and most crucial theme was that participating in sport should be open to all, and that giving everyone this opportunity will create a happier, healthier country.
- **Physical Activity:** promoting physical activity, and not only sport, is a core component of strategies to improve the health of the nation.

The Department for Health (DfH) published its Action Plan on Childhood Obesity in summer 2016. It identified the cause of obesity as an energy imbalance: taking in more energy through food than we use through activity. It therefore singles out promoting and increasing more physical activity as a core element in tackling obesity in children.

These three documents demonstrate how cycling plays a central role in meeting government objectives, whether it is cycling for practical purposes, i.e. commuting, or for leisure or sport.

Regional support for active travel

There has been a step-change in funding and support for cycling in London in recent years. The 2013 publication by the Greater London Authority of the Mayor's Vision for Cycling in London was widely reported as a 'game changer' for cycling in the capital. In his foreword, Transport for London (TfL)'s Commissioner, Sir Peter Hendy, stated that TfL is committed to funding and delivering the ambitions set out in the Vision, noting that implementation of the Vision is not just about cycle routes but about realising the "huge health and economic benefits that greater cycling can bring."

Now, in 2016, many of the schemes put forward in the Mayor's Vision for Cycling are being realised; from the East-West and North-South Superhighways to Quietways and mini-Holland boroughs; two of which – Waltham Forest and Enfield – border the Park. So now is an exciting time for cycling in London, and there is a momentum to be capitalised upon.

The arrival of Mayor Khan in May 2016 has confirmed a continuation of this direction of travel as he has pledged to continue the progress made so far for walking and cycling. Between 2016 – 2022, 5.5% of TfL's budget (£770m) has been pledged to cycling, equivalent to £17 per Londoner. There is therefore now, like seldom before, the political will, ambition and funding to get more people cycling, more safely and more

often. Londoners want to try cycling or to cycle more, and are demanding better networks, and so ensuring that funding for cycling is used in the best possible way. TfL is in the process of identifying long-term strategic cycle routes across London with the aim of providing a comprehensive network for utility cycling across London.

Further to this, and of relevance to the southern portion of the Park, is the effect of the London 2012 Olympic legacy. This involves physical changes to the built environment in the Queen Elizabeth Olympic Park (QEOP), which is now fully open and includes the Lee Valley VeloPark among other legacy sporting venues, which are attracting more and more leisure and sporting visitors to the Park. In addition, the large new residential developments such as the Olympic village bring more people into close proximity to the Park. In a wider sense, there is also the legacy of Olympic success both in London and recently in Rio which contributes to the increasing popularity of cycling for recreation and sport.

Local policy context

Eight local transport authorities adjoin the Park; this section details their local strategies and plans that are relevant to cycling in the Park.

London Borough of Tower Hamlets

The London Borough of Tower Hamlets's Core Strategy to 2025 includes the improvement of access to strategically important public open spaces, which include the Park.

Tower Hamlets Council has a vision to develop Fish Island, between Victoria Park and the Olympic Park, into a sustainable, mixed-use community. As part of these plans, they will enhance greenway and towpath connections as well new bridges to make Fish Island a more accessible place on foot and by bike, which will maximise the connections to the Olympic Park and Stratford City.

London Borough of Newham

The London Borough of Newham currently has low levels of cycling, although TfL has identified Newham as a borough with a very high potential to increase cycling numbers. Newham Council's Core Strategy to 2027 seeks to promote new or enhanced open space and walking and cycling routes throughout the borough, including along the Lower Lea Valley. In doing so, the borough wants to better connect residents of Newham to the River Thames, the Olympic Park and the Park. To increase accessibility to the Park from surrounding areas, the borough wants to place new bridges over rivers and barriers to better connect neighbouring communities.

Newham is working to improve and complete cyclist connections through the Lower Lea Valley. Specific schemes include continuing towpath access to Canning Town south of Cody Dock and two cyclist and pedestrian bridges across the River Lea to Tower Hamlets – one at Poplar Reach and one at Leamouth to connect to the City Island development. TfL Quietway

route 6 will run through the centre of the QEOP connecting to Honor Lee Avenue and further east into Newham.

The Newham Greenway, which crosses the southern edge of the QEOP, currently provides a crossing and access points for cyclists to the Park. The link between Stratford High Street and the View Tube is currently closed but will open following the completion of Thames Water works at Waterworks River. There is also a ramped connection being installed west of Abbey Creek to improve the connection to the Channelsea path. Newham has also secured TfL funding to install lighting and CCTV along the length of the Greenway to improve safety.

London Borough of Hackney

The London Borough of Hackney has the highest cycling mode share of all London boroughs. Hackney aims to continue to create the best conditions to encourage more walking and cycling, and all new transport schemes and development proposals are assessed against the need to promote these modes of transport. Hackney aims to improve conditions for cyclists further by creating more 20mph zones, continuing its implementation of cycle permeability schemes, training cyclists and improving cycle parking facilities, and promoting greenway routes such as the Lee Valley Path North.

Hackney Council recognised the importance of utilising green spaces and parks for cycling routes in their 2015 Cycling Plan. They pledge to

continue working with partners such as the C&RT to develop and improve the routes for cyclists in the Park, removing pinch points and working on campaigns to promote considerate cycling to minimise conflict with other path users. Hackney's recently realised Wetlands to Wetlands Greenway project connects into the Park at Springfield Park east to Walthamstow.

London Borough of Waltham Forest

Waltham Forest Council acknowledges that there are barriers to accessing the Park from the borough; railway lines, major roads, waterways, industrial areas and reservoirs limit accessibility to the Park for cyclists and pedestrians. The borough wants to improve pedestrian and cycle access to green and open spaces, particularly to the QEOP, the Lee Valley Regional Park and Epping Forest. The borough wants to develop a network of safe walking and cycling routes that are well designed and legible, and has been progressing its Enjoy Waltham Forest project with mini-Holland funding from TfL.

Enjoy Waltham Forest delivers improvements for cyclists across the borough, including improved cycle facilities along the major roads which lead into the Park: Lea Bridge Road, Forest Road and Ruckholt Road. In addition they are developing cycle hubs and Brompton cycle hire at stations across the borough, including at Blackhorse Road and

Leyton stations. They are developing improved wayfinding and mapping of cycling in the borough, and they intend to make the most of opportunities to work in partnership with the LVRPA to maximise visitors using the Park. New regeneration proposals for areas such as Lea Valley Eastside will enable cycling enhancements and benefits created in the QEOP to be extended further north into the Park, up through to Lea Bridge Road whilst also creating better links for new residents and visitors.

The Council has pledged to work with the LVRPA to enhance the green links between to the Park and to ensure easy and sustainable access to green spaces across the borough.

London Borough of Haringey

Haringey Council wants to improve the legibility of the borough's principal roads, cycle paths and footways as well as improve the accessibility and permeability of public spaces for walking and cycling. The Council completed the Greenway project, which links green spaces across the borough from the Park in the east to the Parkland walk to Muswell Hill, via Finsbury Park.

Within Haringey Council's Corporate Plan is the objective to make Haringey one of the most cycling and pedestrian friendly boroughs in London. In its Local Implementation Plan 2011-2031, Haringey identified the Park as a significant recreational waterway and cycle route, which can serve to link Haringey with

► 1: The Enfield Plan:
Core Strategy 2010
– 2025, p.144

developments in East London, in particular the QEOP. The Council intends to improve links between the regeneration area in Tottenham and the Park, for example, through improving cyclist access across the railway line at Northumberland Park and improving the link at Marigold Road. They cite the existing barriers of the railway line and major roads as hampering current connections between the borough and the Park.

London Borough of Enfield

Encouraging cycling is a key transport priority with Cycle Enfield, supported by mini-Holland funding, combining extensive physical network improvements and additions with a range of supporting measures including cycle training, hire and maintenance. The new cycleway network will provide improved access to important destinations like the Park.

One of the strategic objectives of Enfield Council's Core Strategy 2010-2025 is to improve access to green areas and waterways, in particular for the communities close to the Park. They, like other boroughs, identify barriers to pedestrian and cyclist access to the Park from the borough: the West Anglia railway line, industrial and housing estates, north-south roads and the North Circular road. In addition, a large part of the Park in this area consists of reservoirs to which access is restricted. Enfield will work with stakeholders to prioritise pedestrian and cyclist schemes that link communities

on either side of the West Anglia railway to schools, developments, greenways and the Park. This includes a strategy to deliver a path along the western bank of the River Lea by requiring new developments seeking planning permission to provide a strip of land in perpetuity.

By supporting the work of the LVRPA, the council hopes to realise the potential of the Park and "make the best use of the waterway network in the upper Lee Valley, seeking to fully restore the waterways and improve their pathways and facilities for freight, recreational and educational use¹".

The London Legacy Development Corporation

The London Legacy Development Corporation (LLDC) was created to assure the legacy of the 2012 Olympic Park; its remit covers the QEOP and its immediate surrounds. Its vision is to create a dynamic new metropolitan centre for London, in which the QEOP will be a catalyst for growth and regeneration in the area, seeing the creation of new homes, jobs and visitor attractions. The QEOP is therefore in the process of change in terms of its physical environment, with improved public and green space, 2,500 new homes and two new schools planned and 13,000 new jobs forecast (mostly in the Here East development) by 2025.

Hertfordshire County Council

Hertfordshire County Council's cycling strategy states the county has the

lowest level of cycling to work in the East of England region, but with over 40% of journeys beginning and ending in the same town. There is therefore a significant untapped potential for cycling. Urban transport Plans (UTPs) for districts within Hertfordshire highlight that sections of path in the Park are of poor quality, that east-west links could be improved, specifically in terms of crossing the West Anglia railway, and that links from town centres to the Park could be improved.

The Hertford and Ware UTP (2010) identified various barriers to accessing the Park. The A414 is identified as one of the main barriers for north-south cycle traffic. In Ware, cycle provisions to cross traffic-dominated streets around the railway station are lacking. To enter the Park from the north, cyclists have to cross traffic-dominated Star Street, and to enter the park from the west, cyclists have to cross Viaduct Road. Furthermore, the river can currently only be crossed via Bridge Foot to Star Street, and there is no pedestrian or cycle access under Bridge Foot, and instead cyclists have to cross the traffic dominated road to access the riverside path. The UTP identifies the width constraints on towpaths in the Lee Valley as the main reason why these paths are not used by commuting cyclists, as it can cause conflict between cyclists and pedestrians. Furthermore, poor surfacing of the path and the impact of poor drainage could make it unattractive to use throughout

the year. The UTP identified several planned cycling and pedestrian routes that are intended to link together the fragmented cycle network and upgrade existing infrastructure.

Cycle data captured for the Travelsmart (2010) initiative for the Broxbourne and Hoddesdon area shows that cycle levels increase during the weekend, with trips for leisure being the largest share. The Council's vision for the Broxbourne area, set out in their emerging Broxbourne Cycling Strategy, is to improve walking and cycling along three major routes: along the New River, which flows parallel to the Park, along the eastern side of the A10 and along the eastern side of West Anglia railway. All these areas are within or border the Lee Valley Regional Park.

Essex County Council

Essex County Council recently published a new Cycling Strategy for the whole county, which aims to double the number of cycling trips from 2014 to 2025. The strategy seeks to promote cycling both as a practical means of transport for short journeys and as an enjoyable participation activity for sport.

Within the countywide strategy sit district level Cycling Action Plans, whose aim is to improve the cycling network in local areas. The Epping Forest District Cycling Action Plan is of most relevance for the Park given its proximity. Essex County Council is seeking to improve links with NCN1 and to establish making

► 2: <https://canalrivertrust.org.uk/about-us/our-campaigns/share-the-space-our-towpath-code>

good links to the other urban areas of the Epping Forest District. They identify the busy road junction of the A121 and Meridian Way as a location in need of improving for cyclists.

The Council highlights intensive housing development forthcoming in and around Harlow in the coming years. With this development, they intend to produce a Harlow Cycling Action Plan alongside an updated Epping Forest District Cycling Action Plan, which will seek to make better use of and improve the existing River Stort towpath leading into the Park from Harlow via Roydon.

Canal & River Trust

The C&RT has responsibility for the towpaths in the Park. They recognise that there are competing users of the towpaths: walkers, cyclists, boaters, anglers, wildlife who interact with each other and can sometimes come into conflict. Among them, boaters pay for their space adjacent to the towpath, while other users do not pay directly for its use. The C&RT promotes considerate sharing of the towpaths as their experience has shown that drawing lines on the towpath to segregate it between users is not very effective. Their 'Share the Space, Drop your Pace' towpath code is designed to promote considerate sharing of the towpaths².

What does this mean for the Lee Valley Regional Park?

The policy context described in this section illustrates a positive one for promoting and developing cycling measures in the Park in coming years. Increasing cycling for leisure and practical purposes fits in with the national government's agenda for transport, physical activity and health. This is consistent at regional level too, as London has improved rapidly in its provision for cyclists in recent years.

At a local level, there are consistent themes that emerge from local policy and planning. All of the neighbouring boroughs want to promote and improve their cycling facilities, with many having new planned routes stretching across their boroughs. There is a general intention to improve links into the Park, although many boroughs identify barriers which impair cyclist and pedestrian access, such as the railway line, major roads or industrial or housing estates which lack permeability.

We have developed our strategy with this context in mind. It is clear that working closely with local partners will be crucial to improving cycling conditions in the Park.

3 Vision and objectives of our strategy

This section introduces our vision and objectives for the Lee Valley Regional Park cycling strategy.

Our vision for cycling in the Lee Valley Regional Park

Our vision is for the Lee Valley Regional Park to be a world class destination for cycling

Our vision ties in with the overarching vision for the Park that it should be a world class leisure destination. The underlying outcome of this vision is that more people will visit and enjoy the Park.

Objectives

1. Improve access to the Park for people who want to cycle there (i.e. help people to get there by bike).
2. Improve access within the Park for people cycling: make it easy for people to cycle around the Park.
3. Improve awareness of the Park's cycling offer, particularly among residents of neighbouring boroughs and capitalise on the success of and interest generated by the Lee Valley VeloPark and the range of cycling events that take place.
4. For the Park to be accessible to all (i.e. so that disabled people can also enjoy cycling in the Park).
5. Promote safety and security among those cycling and walking in the Park.



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Existing conditions for cycling in the Park

The Lee Valley Regional Park already has a strong cycling offer. Along its length from the River Thames to Hertfordshire there are different sections which offer differing experiences; whether it is moving through the changing inner city environments around Bow and the Olympic Park, through the marshland between Hackney and Walthamstow, cycling adjacent to the reservoirs near Tottenham or dissecting the lakes north of Cheshunt.

North-south cycling routes

The principal cycling route, which covers almost the entire length of the Park, is the National Cycle Network (NCN) route 1, which becomes NCN61 for the northernmost stretch of the Park from Rye House to Ware; NCN1 forks east across the Park towards Roydon.

NCN1 joins the Park at Hackney Wick; from there, for the majority of the length of the Park, it follows the path next to the River Lea or the River Lee Navigation canal. NCN1 also deviates to take in scenic areas of the Park, for example around Walthamstow Marshes. For the most part NCN1 is on traffic-free routes, signposted by fingerposts showing the red-boxed '1'.

The towpath next to the River Lea/ Lee Navigation canal provides a linear, traffic-free, north-south route through the Park. For sections of the Park, there are multiple other paths that cyclists can choose, for example between Cheshunt and Broxbourne or through Walthamstow

Marshes. However, in some sections of the Park choice is limited to one path, e.g. next to the reservoirs near Tottenham. The exception to this continuity is in the southernmost section of the Park, where there isn't currently a continuous path south of Twelvewoods Park / Cody Dock.



East-west cycling routes

Several east-west cycling routes do cut across the Park, although north-south links are more established than east-west links. Existing east-west connections are generally good around the QEOP and north of that into Hackney and Walthamstow Marshes. Given the barriers created by the reservoirs, east-west connections are poorer between Haringey and Enfield in the west and Waltham Forest in the east. North of Waltham Cross east-west connections are slightly more frequent. For the last section from Rye House to Ware they are fewer, impeded by the railway line, although there is less demand to make east-west movements given the sparser

population. Access points into and out of the Park for cyclists and pedestrians are also more limited further north in the Park than in its southern section.

Quality and experience of cycling routes

For the most part, paths through the Park have sufficient width for one cyclist to pass in each direction. Typically, the canal towpath does not offer enough space for a wider path than this. Where cycling routes follow paths that are not towpaths, they tend to be wider, allowing two cyclists to pass one cyclist in the other direction, i.e. three cyclists wide.

Paths in the Park are typically either tarmac or smooth gravel. There are small sections where surface is rougher, with cobbles, or where the path narrows to a pinch point or an obstacle. We discuss these issues further in the following section.



Sharing cycling routes

Towpath routes are managed and maintained by the C&RT. They promote their Share the Space, Drop your Pace campaign via signage which reminds cyclists that paths are shared with pedestrians and that pedestrians have priority. These signs tend to be placed at pinch points on the path, for example, under bridges to remind cyclists to slow down and be alert for pedestrians.

Another aspect of sharing the towpath is interaction with boat users or anglers, who can be disturbed by passing cyclists, particularly if they are moored at a narrow stage of the towpath.

Stakeholders do report some minor experiences of conflict, however the majority of stakeholder feedback and experience on site visits indicate few significant problems with pedestrian/cyclist conflict on the shared paths in the Park.

Visitor attractions

The Visit Lee Valley website has information on the Park's offer for cycling, including information about the Lee Valley VeloPark, locations where you can hire bikes and detail for a suite of planned short cycle routes. The Lee Valley VeloPark is an exceptional attraction for recreational cyclists; it offers track cycling on the Olympic velodrome, a road cycling circuit, a BMX track and mountain bike trails nearby. There are many other visitor attractions in the Park, including the Lee Valley White Water Centre, Lee Valley Boat Centre, the Lee Valley Ice Centre and nature reserves to be found along the length of the Park.

Members of the public can hire cycles in Broxbourne, in the north of the Park by the hour or for several days. The service is popular and offers adapted mountain bikes, well-suited to the trails in the Park. There is also cycle hire located at the View Tube off the Newham Greenway, offering cycle hire by the hour or per day. The Santander London cycle hire scheme now extends into the QEOP, including the Lee Valley VeloPark.

Types of cyclist

The Park attracts a mix of cyclists who use it: many cyclists come for leisure rides as well as some who commute through or along the Park. There tend to be more leisure cyclists towards the northern end of the Park, and a greater proportion of commuters in the southern section, given its proximity to central London.

There are opportunities for leisure rides in the Park which include short family rides with children – perhaps taking advantage of the suggested cycle routes on the Park website – or days out to venues within the Park, such as the Lee Valley White Water Centre. Some road cyclists or mountain bikers utilise sections of the Park to leave London on a traffic-free route as part of longer rides out into the countryside beyond.

Cycle-rail integration

It is possible to travel with a bicycle on the London Overground and Greater Anglia rail line running parallel to the Park. Restrictions apply on peak time weekday services between 0730-0930 and 1600-1900. Outside of these times train passengers can bring their bike with them. This can facilitate leisure trips, allowing access to more distant parts of the Park, or allowing a one-way cycle, with a return on the train. The existing rolling stock on these lines does not include specific bike spaces, although there is space in each door vestibule to accommodate a bicycle. This can make travelling by train less comfortable as the vestibules



are not specifically designed to accommodate a bicycle, passengers also need to monitor their bike to keep them out of the way of other passengers and it can be hard to find space on crowded services.

Issues and opportunities

While there are many strengths to the existing offer for cyclists in the Park, there are outstanding issues and barriers, which may prevent more cyclists from enjoying the Park and detract from the overall experience of cycling in the Park. Working with our partners and stakeholders we have identified the following issues and opportunities.

Physical barriers to accessing the Park

Accessing the Park from adjoining areas could be improved. The consensus among stakeholders in the neighbouring boroughs is that there are too few access points for pedestrians and cyclists to join routes in the Park, particularly in the northern section of the Park. This limited access is in large part due to significant physical barriers which exist to accessing the Park. These barriers include:

- The West Anglia railway line, which impedes access to the east of the Park around Walthamstow and then creates a barrier to the west of the Park north of Tottenham. Currently there are some level crossings and some footbridges across the railway line, the latter of which are not well suited to cyclists' needs.

In addition, Network Rail intends to remove many of the level crossings in the coming years, replacing most of them with bridges.

- Major roads also impair access creating a hostile environment for cyclists to cross.
- Industrial, trading and housing estates are another factor in poor accessibility into the Park as they can be quite impermeable for pedestrians and cyclists.

Informational barriers to accessing the Park

Further to these physical barriers is the fact that potential visitors to the Park, in particular neighbouring residents, may lack awareness of what the Park offers. This is partly because existing access points and attractions could be better signposted or better publicised. Even if access points are suitable for cyclists, they may not be very prominent or visible, and cyclists may not know that by following a given path through a housing estate, they can actually access the Park. Knowing a cycle route's destination and the distance to reach that destination is reassuring and encouraging for cyclists, particularly those who don't cycle regularly.

Missing cycling connections

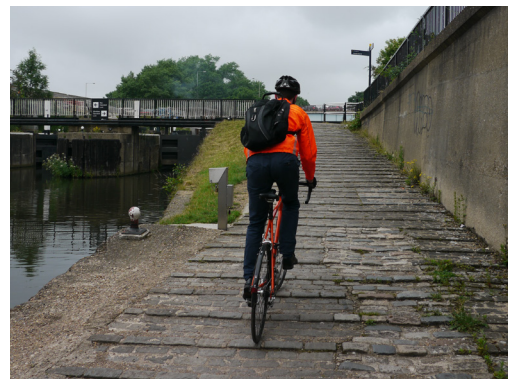
While the Park has a good existing network of routes for cycling, there are sections of the Park where the cycling network is incomplete. The two sections where this is most pronounced are the Lower Lea Valley,

south of Twelvetrees, and between Springfield Park and Enfield Lock:

- South of Twelvetrees there is currently a towpath that runs to Cody Dock, but no further, meaning that Canning Town and Leamouth are not accessible via the River Lea. Historical industrial landuse and the meandering river are the principal causes for this gap in the network.
- North of Springfield Park, cyclists can use the towpath along the western side of the Park but there are no alternative routes due to the reservoirs and waterworks in this section of the Park.

Barriers to movement within the Park

Once cyclists have entered the Park, there are issues which hamper their movement around it. These include sections of path with a poor surface such as damaged surfacing or where cobbles have been used to create 'speed bumps'. Other barriers to movement include barriers and metalwork designed to prevent powered two-wheelers accessing the paths, pinch points where the path narrows, e.g. under a bridge, and encroaching vegetation which effectively narrows the path. Sections of path where the path narrows can



bring any potential conflict between path users to a head and pinch points or metal barriers can be a source of frustration or discomfort for cyclists, deterring them from returning to use this route in future.

Signage and wayfinding

A range of signage can be found across the park, originating from multiple organisations and installed over at different times. Signage includes directional boards, maps, fingerposts as shown below and poster cases.

Our observations have highlighted gaps/issues including:

- Lack of information and signage at key decision points
- Clutter and repetition of information and signage;
- Accessibility;
- Consistency of content, hierarchy and sign placement; and
- Attractiveness.

System gaps can be seen especially in cycle wayfinding provision. Cycle routes have no corresponding wayfinding information or signage on the ground to support journeys. Similarly, signposting of NCN1 is counterintuitive in places with cyclists being directed away from the continuing towpath, which appears suitable for cycling, only for it to re-join the same towpath further along having taken a detour into another section of the Park. This happens, for example, around Gunpowder Park near Enfield

Lock where NCN1 deviates into the park and later rejoins the towpath.

More generally, it is also difficult for cyclists wishing to explore the existing paths on their own to do so easily as mapping or signage isn't comprehensive enough for them to make up their own routes, or to know that certain routes exist. There is an example of this in the lower Lee Valley, where the Limehouse Cut joins the River Lea; there is a continuous cyclable path that joins up with the towpath to Hackney Wick. However, it is not clearly signed and there are points where the path is not intuitive or legible, e.g. near Three Mills Studios.

Wayfinding and signage provision within the park should:

- Provide consistent identification, orientation and navigation;
- Encourage visiting, exploring and appreciation of the natural environment;
- Serve all park users regardless of ability; and
- Reduce clutter and redundant infrastructure.

Lighting preventing night time or winter use

Almost none of the paths through the Park have artificial lighting. This means that their use after dark or in winter evenings is difficult. This lack of lighting is due to concerns over wildlife disruption and that, given the predominant use by leisure cyclists, night time use may be less of a priority.



5

Measures to develop the cycling offer in the Park

This section sets out what we will do to encourage and promote cycling in the park, drawing on the policy context, existing situation and the issues and considerations identified previously.

1. Develop key gateways to the Park

Improving the number and quality of access points into and out of the Park is a crucial component in increasing cycling visitors to the Park. Effective partnership working with neighbouring boroughs will be needed in order to achieve this. Neighbouring boroughs have their own planned cycle routes, which need to be taken account of when considering where to improve or add new gateways to the Park. For example, Enfield Council is looking to improve the route along the river into Broxbourne as well as providing gateway links at Lea Valley Road and Picketts Lock, while Waltham Forest Council is developing segregated cycle tracks that cross the Park along Forest Road and further south at Lea Bridge Road. It is therefore important to work with them to maximise the potential for interchange and connection at these sites.

We will work towards developing key gateways to the Park, which will be the main access points to the Park, in addition to many other smaller entrances. These key gateways will be characterised by:

- Clear access for cyclists to the Park in the form of a wide, clear, unobstructed path with a good surface. Key gateways should be fit for purpose to encourage use by disabled people.

- Clear wayfinding. This will involve clear signposting to the gateway itself from nearby, and a map panel showing cycling routes in the vicinity of that gateway. The visitor car park at Enfield Lock currently has a map panel in this style, as shown below. However, the current panel would be better to devote more space to nearby routes and less space to text.
- Cycle parking – where cycle parking is appropriate, at the least a bank of Sheffield stands, and, where suitable, larger facilities.

The majority of gateways should best cater for the needs of leisure cyclists however some will see higher commuter use due to their alignment on commuter routes originating in neighbouring boroughs. Gateways targeted at leisure cyclists will have wayfinding which highlights leisure routes and visitor attractions in the vicinity of that gateway. Gateways which cater for more commuters will have wider access, to accommodate higher peak time flows of cyclists and avoid conflict arising at these times between different users.

Stakeholders identified the following sites as key gateways to the Park. While many of them exist already and some are well-used, many would need an overhaul of their signposting and mapping. Some would need physical infrastructure improvements to make them feasible. Those which we anticipate to see higher commuter flows are marked by a [c]. Each key gateway is highlighted on the attached mapping of the Park in Appendix A:



- | | |
|---|--|
| 1. Canning Town [c] | 12. Pickett's Lock |
| 2. Bow Roundabout [c] | 13. Lea Valley Road (both east (Ponders End) and west) |
| 3. Newham Greenway | 14. Enfield Lock / Enfield Island Village |
| 4. Hackney Wick / Here East [c] | 15. Waltham Cross – access from A121 |
| 5. Ruckholt Road / Eastway [c] | 16. Cheshunt station [c] |
| 6. Lea Bridge Road (both east and west of Park) [c] | 17. Turnford Brook |
| 7. Coppermill Lane [c] | 18. Lower Nazeing / Nazeing Road |
| 8. Springfield Park [c] | 19. Broxbourne [c] |
| 9. Forest Road / Tottenham Hale | 20. St Margarets |
| 10. Tottenham Marshes / Stonebridge Lock | 21. Ware |
| 11. Sandpiper Close / south of Banbury reservoir | |

2. Work with partners to address physical barriers to access

Improving access and creating key gateways will need to take account of existing barriers and how to overcome these or work around them. The West Anglia railway line currently has many level crossings, which allow access for cyclists without having to climb stairs or ramps. Network Rail has a long-term plan to remove level crossings across the entirety of its network in response to safety concerns. If these are replaced by footbridges with stepped access then the railway may become an even greater barrier to accessing the Park than at present. As such, it will be a priority of the LVRPA to work in partnership with Network Rail and neighbouring boroughs to secure plans for ramped access for cyclists to replacement bridges at least at the following key gateway locations, if not at all level crossings adjacent to the Park:

- Theobald's Grove – Trinity Lane
- Cheshunt
- Wharf Road
- St Margarets

Access across major roads is a barrier to the realisation of several key gateways. Ramped bridges, underpasses or signalised crossings (as appropriate) across major roads would unlock access for cyclists at the following key gateways:

- Waltham Cross: access across A121
- Enfield Lock: crossing of Mollison Avenue

- Harbet Road (north of Banbury reservoir): access across the North Circular Road

Access through impermeable trading estates or housing estates is another barrier to opening up new gateways to the Park. We will work with neighbouring boroughs to identify potential new access routes through industrial and housing estates.

3. Raise the profile of cycling in the Park

Overcoming a lack of awareness of routes and access points is almost as important as overcoming the physical barriers themselves. As described in the previous section, if potential visitors do not know about the routes and access points to the Park, they won't be able to use them. Therefore we shall increase awareness of the Park's cycling offer through advertising and publicity. This will be particularly focussed on adjacent communities to the Park. It could also involve a publicity campaign across London, Hertfordshire and Essex to promote leisure routes for cyclists. In particular, this should focus on residents of new developments and regeneration schemes near the Park as their travel and leisure habits will not be established having moved to a new home.

In our publicity, we shall emphasise the offer of everyday leisure and green infrastructure that the Park provides, specifically in terms of health benefits. We will also tailor our publicity to help ensure a broader appeal of

cycling among the local population.

Cycling events centred at the Lee Valley VeloPark provide an opportunity to promote cycling more widely in the Park. They offer the chance to host sporting events such as charity or sportive rides that incorporate the wider Park. Guided leisure rides with local communities also present an opportunity to introduce more people to the cycling offer of the Park.

4. Improve signage and wayfinding

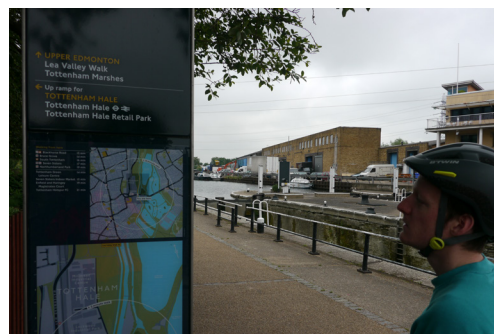
Improving signage and wayfinding to make more of the existing routes and facilities for cyclists is a key component in improving the offer for cyclists throughout the Park, as there are existing good routes for cyclists, but better use could be made of them. Improving wayfinding in the Park, in a way that is suitable to the needs of cyclists, as well as sensitive to the needs of the environment (i.e. minimising clutter), could be achieved through:

1. On the ground wayfinding to provide clearer, frequent signposts to key attractions or nearby places, e.g. Lee Valley Ice Centre or Cheshunt



station. This could also include the use of painted arrows on the road, such as those used to mark Quietway routes (see image below). It should also include improvements to the legibility of NCN1 and 61, which can take counterintuitive turns and there should also be improved signposting to make it easier for cyclists to join the NCN routes from nearby.

2. Regular use of mapping panels at key locations, in the style of Legible London, tailored to the needs of cyclists in the Lee Valley, would allow cyclists to find their way around more easily.



3. The suggested cycle routes on the Park website would be improved by marking them on the ground, which would make route finding easier rather than users having to carry a printed map or frequently check progress on their phones. Colour-coded lines could be used to demarcate each route, or coloured arrows at key turnings on those routes.
4. Better use could be made of online mapping so cyclists can

locate themselves easily on the move. As smartphones are now so common, this will be the way that many cyclists will navigate or plan their routes.

There are two potential ways of achieving better wayfinding in the Park. Firstly, the Park could commission a wayfinding strategy to cover the whole Park in a consistent, comprehensive way, with a thorough approach to wayfinding, potentially employing the node points approach suggested in the box below. It would be important that neighbouring boroughs and partners are involved in this process to make sure that the Park's wayfinding links in well with its neighbouring areas.

Secondly, the LVRPA could seek to work with neighbouring boroughs and partners such as TfL, Sustrans and C&RT as they bring forward new routes and use these opportunities to improve wayfinding through the Park that ties in with wider cycling network plans. Whichever approach is taken, the LVRPA will need to work closely with neighbouring boroughs and partners to assure no routes are missed, no duplication takes place, and that wayfinding is consistent in terms of sign design and naming conventions.

Node point wayfinding

We will consider the Dutch approach to cycle wayfinding known as 'knooppunten', which roughly translates as 'node points'. The system works by numbering certain key junctions or nodes across a given



► 3: The Lea River Park:
<http://queenelizabetholympicpark.co.uk/the-park/attractions/around-the-park/the-leaway>

area. Small fingerposts signal the way between each node and when the cyclist reaches the node there is a map panel showing the surrounding network, from where they can decide which number they will cycle to next. The advantage of this system is that it lets cyclists devise their own route across an area, and if they lose track of the specific route they were following, they can easily amend their route.

5. Improve the cycling network

The LVRPA understands the importance of a comprehensive cycle network, and the Park's role in the wider cycle network. It is therefore important to complete the missing cycling connections identified earlier in this strategy as well as work to offer alternative routes to take the pressure off certain stretches of the network. Competing uses by different users, e.g. leisure and commuting cyclists, where there is only one route can be a source of conflict. Providing alternative routes may allow for one route to be designated for commuters and others for leisure.

The towpath provides a continuous north-south route throughout the majority of the length of the Park. As described in previous sections, this does not extend to the southernmost part of the Park, south of Cody Dock. The Lea River Park project³ aims to remedy poor cycling connections in this area. A collaboration between the LLDC, Newham and Tower Hamlets, TfL and the Mayor of London, this project includes plans to complete

the north-south towpath connections to Canning Town and Leamouth as well as install new bridges for cyclists and pedestrians – at Poplar Reach and Leamouth. The LVRPA supports this project and will work with its partners to realise the improved cyclist routes that it proposes.

As described in previous sections, there are parts of the Park where there are several alternative north-south routes. From the QEOP north to Walthamstow Marshes there are multiple north-south route options. North of Enfield Lock, the Park opens out and there are several routes for cyclists to choose. However, in the middle of these two sections, reservoirs limit the scope for extra route options. Currently, the western towpath is the only route from Springfield Park to Enfield Lock.

An option for an additional north-south route would be to follow the River Lea flood relief channel along the eastern edge of the Park from its southern junction with Coppermill Lane north to Banbury Reservoir. From there it would trace the eastern edge of the William Girling and King George V reservoirs. A second option would be to explore gaining permissive access to the routes between the lower reservoirs, such as Lockwood Reservoir, to allow a more central route between Coppermill Lane and Banbury Reservoir. We understand, at the time of writing, that progress has been made with Thames Water towards realising this second route.

Both indicative alignments are shown on the map of the Park in Appendix A.

If one of these eastern routes were possible, it would open up a secondary north-south route up the eastern side of the Park, allowing cyclists the option of a different route from the towpath.

In addition to these routes, we propose the following alternative north-south routes to take pressure off existing routes (these routes are shown on the map in Appendix A):

- An eastern route from Ware to Roydon via St. Margarets.
- Wayfinding of a completed cycle route flanking the eastern side of the West Anglia railway line from Hoddesdon to Waltham Cross, via Broxbourne and Cheshunt using existing paths.

As outlined in the previous section, there is scope to deliver additional east-west connections. Some of these links already exist, and would benefit from better wayfinding; some require infrastructure improvements. Given that east-west connections link into wider routes through neighbouring boroughs, it will be vital to work closely with neighbouring authorities to identify and understand their planned routes, and to support their development. From our stakeholder engagement, we know of the following east-west routes that will be developed through the Park in the near future, that we support:

- Quietway 6: QEOP / Honor Lea Avenue (TfL)
- Lea Bridge Road (Waltham Forest – Hackney)
- Quietway 2: Coppermill Lane (TfL)
- Forest Road (Waltham Forest – Haringey)
- Waltham Abbey cycle improvements (identified in Essex's Epping Forest District Cycling Action Plan), in particular A121 / Meridian Way

Additional to these, we have identified several east-west alignments where we will work to develop better links for cycling:

- Leaside Road (Ikea Tottenham) / Northumberland Park – Sandpiper Close (south of Banbury reservoir): we understand this will be progressed as part of Meridian Water development
- Lea Valley Road (A110) connecting Enfield and Waltham Forest
- Turnford Brook – Waltham Road/ St.Leonards Road junction
- Broxbourne – Lower Nazeing
- Dobb's Weir – Hoddesdon town centre, identified in Broxbourne Cycling Strategy
- Little Amwell – Easneye Farm

We will look for opportunities to work with neighbouring boroughs to progress these connections and to link them into wider routes that they are planning. In particular, we shall look to develop further east-west cycle routes in the north of the Park in collaboration with Essex and Hertfordshire County Councils, which connect with local nature and heritage attractions. This will use the potential of cycling and cycle routes to link and promote attractions within and beyond the Park's boundaries, for example a wetland to woodland link between Fishers Green to Epping Forest, or 'Birds of Paradise' to 'Meercats' route linking The Paradise Wildlife Park in Broxbourne across to the Lee Valley Park Farms in the River Lee Country Park.

6. Improve the quality of paths for cycling

Improving the quality of paths within the Park will require close working with partner organisations. The LVRPA supports the C&RT's work to reduce physical barriers and improve surfacing as part of their Quietways project, as well as TfL's Quietway routes crossing the Park. To facilitate this work the LVRPA will support the C&RT and we will be clear in what we aspire to in terms of good quality routes for cyclists. The Park recognises the guidance given in TfL's London Cycling Design Standards (LCDS). We will seek to ensure our cycle routes feature the following:

- Removal of obstacles to cycling, e.g. barriers, 'kissing gates', steps, especially as these can impede use by disabled people
- A good, even surface; removal of uneven cobbles, speed traps, rough gravel, uneven ground prone to water pooling
- Sufficient width for two pedestrians and cyclists to pass (we will aim to meet the minimum widths detailed in the LCDS, however in places we must work within the constrained width of the towpath)
- Reliable maintenance of paths

We shall arrange for officers of the LVRPA and neighbouring boroughs to receive training in applying the LCDS to help ensure that its good practice guidance is implemented in the Park.

Paths in different sections of the Park have different usage patterns, and so their physical surface may differ accordingly. For example, those in the northern, more rural section of the Park may have more recreational walkers, dog walkers etc. using them, with fewer commuting cyclists, so a tarmac surface may not be essential. There are also sections of paths where heritage features may be retained for historical purposes, e.g. cobbles may be filled in rather than removed.

When assessing the quality of paths for cycling in the Park we will endeavour to 'future proof' paths to accommodate future increases

in population and demand, where possible. Paths should therefore be designed to accommodate higher flows of cyclists than they currently do, especially in areas of notable commuter flows. When planning and upgrading routes, it will be particularly important to be aware of planned new developments which will add significantly to the local population, and thus increase the local demand for cycling. Examples of such developments include Meridian Water in Enfield, planned developments to the north of Waltham Abbey and north of Turnford Brook.

In addition to working towards general improvements to the quality of the cycle network, we will work with partners to realise certain specific improvements:

- Improve the Coppermill Lane connection to help realise TfL Quietway 2 where it passes under the railway – currently the clearance is 1.5 metres
- Improve the legibility and wayfinding of the towpath connection from the Limehouse Cut through to Hackney Wick
- Complete link from Waltham Forest's cycle track on Ruckholt Road to connect with Lee Valley VeloPark
- Remove metal barriers at Stonebridge Lock
- Remove cobbled speed trap at:
 - Markfield Park
 - Ponder's End lock

- Signpost an alternative route for the section of NCN1 which climbs over Clayton Hill, to allow cyclists to avoid the incline

While artificial lighting is not appropriate for much of the Park's cycling network, due its disturbance of wildlife, it may be considered for certain key sections that are used by more commuters. In these sections sensitive lighting schemes or luminous road markings would be an appropriate and welcome intervention to increase safety for cyclists.

7. Encourage considerate sharing of paths

The current approach to promoting considerate sharing of paths between pedestrians and cyclists is focussed on signs encouraging considerate cycling and pedestrian priority at pinch points such as bridges. Given that few stakeholders report significant problems with pedestrian/cyclist conflict, it appears that this approach is working relatively well. Further to this, research conducted into pedestrian / cyclist conflict⁴ on shared use paths shows that segregating users creates a sense of entitlement to 'their' part of the path, which actually exacerbates antagonistic conflict in place of negotiating the sharing of the path.

To continue efforts to minimise conflict, there is scope to make the presence of signs more comprehensive through more frequent reminders where the path narrows and also at points where pedestrian numbers can be higher, for example at Stonebridge

► 4: DfT, 2012, Local Transport Note 1/12: Shared Use Routes for Pedestrians and Cyclists.
Atkins, 2012, Shared Use Operational Review.

Lock café or outside the Anchor and Hope pub in Clapton. This will be of particular importance as cyclist and visitor numbers increase and the paths become more crowded.

We shall also work closely with the C&RT to implement on-site ranger campaigns and wider advertising campaigns as appropriate to increase awareness of how to mitigate and minimise pedestrian-cyclist conflict.

We have identified in previous sections that locations where high numbers of cyclists with different trip purposes, i.e. leisure/commuting cyclists come into contact are potential sources of conflict. Our proposed approach to increase the

number of alternative routes in the cycling network is aimed at reducing pressure on these pinch points.

8. Develop cycle parking and hubs

We will increase the provision of cycle parking throughout the Park, including banks of Sheffield stands at key attractions as well as key gateways, as previously stated. In addition we shall work with key attractions in the Park to improve their facilities for cyclists, i.e. offering cycle pumps or selling basic spare parts such as inner tubes.

We will support the development of cycle hubs in neighbouring boroughs. Cycle hubs are secure,

Example of covered secure cycle parking installed in the London Borough of Waltham Forest



Source: Enjoy Waltham Forest

covered facilities in which cyclists can leave their bike and sometimes a fee is charged for this. Haringey and Waltham Forest plan to develop cycle hub facilities at train stations near to the Park – Tottenham Hale and Blackhorse Road respectively. These facilities would permit, for example, commuters to integrate cycling into a stage of their whole commute, or families who live nearby to leave their bikes securely during the week to use for leisure journeys at the weekend. When these kind of facilities are installed in or near the Park, their design should be sensitive to the Park's location, for example with a green roof.

9. Explore options for cycle hire

As described in Section 4, there are currently three options for hiring a cycle in the Park: Santander cycle hire in the south of the Park, View Tube bikes and Broxbourne cycle hire. The former is part of the wider central London cycle hire scheme, focusing on urban utility cycling for short trips. Broxbourne and View Tube are more geared towards leisure cyclists and are 'origin to origin' where users hire and return the bike to the same location. Urban cycle hire schemes like the Santander cycle hire scheme often require intensive redistribution of returned bicycles as well as supporting funding from sponsorship or advertising to support the operating costs of such a scheme.



Implementing a standalone equivalent to the central London cycle hire scheme with a dense network of docking stations throughout the Park is not suitable. Additional cycle hire opportunities in the Park need to be appropriate and take into account the assumption that most users will be leisure cyclists in a largely non-urban context. These would likely need to adopt a similar model to the existing origin to origin cycle hire schemes.

We believe there is also scope in the south of the Park to extend the TfL Santander cycle hire scheme to include the Lee Valley Hockey and Tennis centre and expand this further up to Lea Bridge Road area establishing a bike hire scheme between the Park's southern venues; of Ice Centre, Riding Centre, Hockey and Tennis Centre and VeloPark.

Suitable locations for the additional origin to origin cycle hire points could include rail stations in the Upper Lee Valley allowing visitors to catch a train to the station and then enter the Park on a hired bike from there, bringing the northern section of the Park into easier reach. The following stations could offer this service, although we would not expect cycle hire to be offered at all of them:

- Tottenham Hale
- Blackhorse Road
- Enfield Lock
- Waltham Cross
- Cheshunt
- St Margarets
- Rye House
- Ware

It is possible that an integrated cycle hire scheme could be introduced whereby users could drop their bike at a different station from where they picked it up. However, this would likely incur more onerous requirements in terms of redistribution of bikes between sites, and may be unviable.

6

Implementation

Sources of funding

In order to realise the measures outlined in the previous section the LVRPA, working with partners, shall seek funding from various sources including but not limited to:

Department for Transport grant funding (outside London)

- Local Growth Fund (capital schemes)
- Access Fund (revenue funding)
- Cycle-Rail funding in conjunction with rail operators
- Potential future funding announced from DfT related to the Cycling and Walking Investment Strategy

Transport for London funding (London)

- Cycle Superhighway / Quietway programmes
- Mini-Hollands

Local Authority / London Borough funding

- Local Implementation Plan (LIP via TfL)
- Developer contributions (Section 106 / Community Infrastructure Levy)

Sporting / leisure sources:

- Sport England
- Big Lottery Fund

Action Plan

The following table sets out our action plan to implement the measures in this strategy, how each measure meets our stated objectives and how each measure will be monitored. Many of the actions outlined in this plan will require close working with partners and for the LVRPA to take advantage of opportunities to implement our plans in tandem with partners, e.g. to join up with TfL or C&RT when they are planning a Quietway route, or to work with a developer to bring forward improvements in or near the Park.

Action plan					
Measure	Objective met	Action	Timeframe	Monitoring measure	Partners
1. Develop key gateways to the Park	1, 4, 5	Implement physical infrastructure improvements to key gateways	Short- to medium-term (2016-2026)	Increase in counts of cycles using automatic cycle counters at key gateways	Neighbouring boroughs, TfL, C&RT, Sustrans, developers
	1, 2, 3	Implement wayfinding improvements at key gateways	Short- to medium-term (2016-2026)	Visitor survey question: ease of navigation in the Park	Neighbouring boroughs, TfL, C&RT, Sustrans, developers
	1, 4, 5	Work with Network Rail and Crossrail 2 to secure ramped access for cyclists at key identified locations when level crossings replaced	Short- to long-term (2016-2030)	Increase in number of level crossings replaced with ramped access bridges	Network Rail, neighbouring boroughs
2. Work with partners to address physical barriers to access	1, 4, 5	Improve access for cyclists across identified major roads near the Park	Short- to long-term (2016-2030)	Increase in number of cycle-friendly access points across identified major roads	Neighbouring boroughs, TfL
	1, 4, 5	Improve permeability of housing / trading / industrial estates	Short- to long-term (2016-2030)	Increase in number of entrances to the Park	Neighbouring boroughs, developers, C&RT
	3	Publicise the Park's cycling offer among neighbouring residents, particularly of new developments	Short-term (2016-2020)	Visitor survey question: how did you hear about the Park's facilities?; Home postcode of respondents to visitor survey; Increase in number of cyclists counted at automated cycle counters near new developments; Travel plan monitoring data from new developments	Neighbouring boroughs, developers
3. Raise the profile of cycling in the Park	3	Implement publicity campaign promoting leisure routes in the Park	Short-term (2016-2020)	Visitor survey question: how did you hear about the Park's facilities?	TfL, neighbouring boroughs
	3, 4	Broaden appeal of cycling through tailored publicity	Short-term (2016-2020)	Demographics of respondents to visitor survey	TfL, neighbouring boroughs, Sustrans, C&RT
	1, 2, 3	Commission a comprehensive wayfinding strategy for the whole of the Park	Short- to medium-term (2016-2026)	Strategy document commissioned	Neighbouring boroughs, TfL, C&RT, Sustrans, developers
4. Improve signage and wayfinding	1, 2, 3	Work with partners to develop consistent wayfinding as they bring forward new routes and developments	Short- to medium-term (2016-2026)	Visitor survey question: ease of navigation in the Park	Neighbouring boroughs, TfL, C&RT, Sustrans, developers

Action Plan (cont.)					
Measure	Objective met	Action	Timeframe	Monitoring measure	Partners
5. Improve the cycling network	2, 5	Continue to support the realisation of the Lea River Park route developments in the southern section of the Park	Short- to medium-term (2016-2026)	Implementation of new cycle routes in southern section of the Park; Increase in counts of cycles using automatic cycle counters on new route	LLDC, Newham, Tower Hamlets, TfL, Mayor of London, Sustrans, C&RT
		Explore the development of alternative north-south route between Coppermill Lane and Enfield Lock	Short- to long-term (2016-2030)	Implementation of new cycle routes in middle section of the Park; Increase in counts of cycles using automatic cycle counters on new route	Thames Water, Waltham Forest, Haringey, Enfield, Sustrans, C&RT
	2, 5	Explore the development of alternative north-south route between Hoddesdon and Waltham Cross	Short- to medium-term (2016-2026)	Implementation of new cycle routes in northern section of the Park; Increase in counts of cycles using automatic cycle counters on new route	Hertfordshire County Council, Broxbourne District Council, Sustrans, C&RT
		Explore the development of alternative north-south route between Roydon and Ware	Short- to medium-term (2016-2026)	Implementation of new cycle routes in northern section of the Park; Increase in counts of cycles using automatic cycle counters on new route	Hertfordshire County Council, Sustrans, C&RT
6. Improve the quality of paths for cycling	1, 2	Support implementation of TfL Quietway routes 2 and 6, and C&RT aspirations for Quietway cycle route	Short-term (2016-2020)	Implementation of new Quietway routes; Increase in counts of cycles using automatic cycle counters on new routes	TfL, Tower Hamlets, Newham, Hackney, Waltham Forest, C&RT
		Support development and implementation of new east-west routes by neighbouring boroughs	Short- to medium-term (2016-2026)	Increase in counts of cycles using automatic cycle counters on new east-west routes	Neighbouring boroughs, TfL, Sustrans, C&RT
	2, 4	Work with partners to realise specific improvements to overcome barriers in the current cycle network	Short-term (2016-2020)	Implementation of specific improvements detailed in strategy document	C&RT, neighbouring boroughs, TfL, Sustrans

Action Plan (cont.)				
Measure	Objective met	Action	Timeframe	Monitoring measure Partners
	2, 4	Arrange training in use of TfL's London Cycling Design Standards for officers of LVRPA and neighbouring boroughs	Short-term (2016-2020)	Training attended by relevant officers TfL, neighbouring boroughs, C&RT, Sustrans
	2, 4	Assure that future cycle routes meet good practice set out in LCDS, where possible, and cater for future increases in demand	Short- to long-term (2016-2030)	Newly implemented cycle routes meet LCDS design standards TfL, neighbouring boroughs, C&RT, Sustrans, developers
	2, 5	Explore the installation of appropriate lighting on key commuting stretches of the Park cycle network	Short- to medium-term (2016-2026)	Increase in counts of cycles using automatic cycle counters in darkness hours C&RT, Sustrans, TfL
7. Encourage considerate sharing of paths	2, 4, 5	Continue to work with C&RT and Sustrans to minimise pedestrian / cyclist conflict through signage and campaigns	Short- to medium-term (2016-2026)	Visitor survey question: instances of conflict experienced C&RT, Sustrans
	2, 4, 5	Explore the development of alternative routes in the Park cycle network to alleviate instances of conflict	Short- to long-term (2016-2030)	Visitor survey question: instances of conflict experienced C&RT, Sustrans, TfL, neighbouring boroughs, developers
8. Develop cycle parking and hubs	1, 2, 4, 5	Increase the provision of cycle parking and facilities at key visitor attractions and key gateways	Short- to medium-term (2016-2026)	Increase in counts of parked cycles at key visitors attractions, key gateways Sustrans, C&RT, TfL
	2, 4	Work with partners to realise specific improvements to overcome barriers in the current cycle network	Short-term (2016-2020)	Implementation of specific improvements detailed in strategy document C&RT, neighbouring boroughs, TfL, Sustrans
	1, 5	Support development of cycle hubs by neighbouring boroughs	Short- to medium-term (2016-2026)	Usage rates of implemented cycle hubs Neighbouring boroughs, TfL, Sustrans
9. Explore options for cycle hire	1, 2	Explore options for further cycle hire locations in the Park	Short- to long-term (2016-2030)	Usage rates of implemented cycle hire; Visitor survey question: what type of bicycle did you use in the Park: your own or a hired cycle? Neighbouring boroughs, TfL, Sustrans, private sector

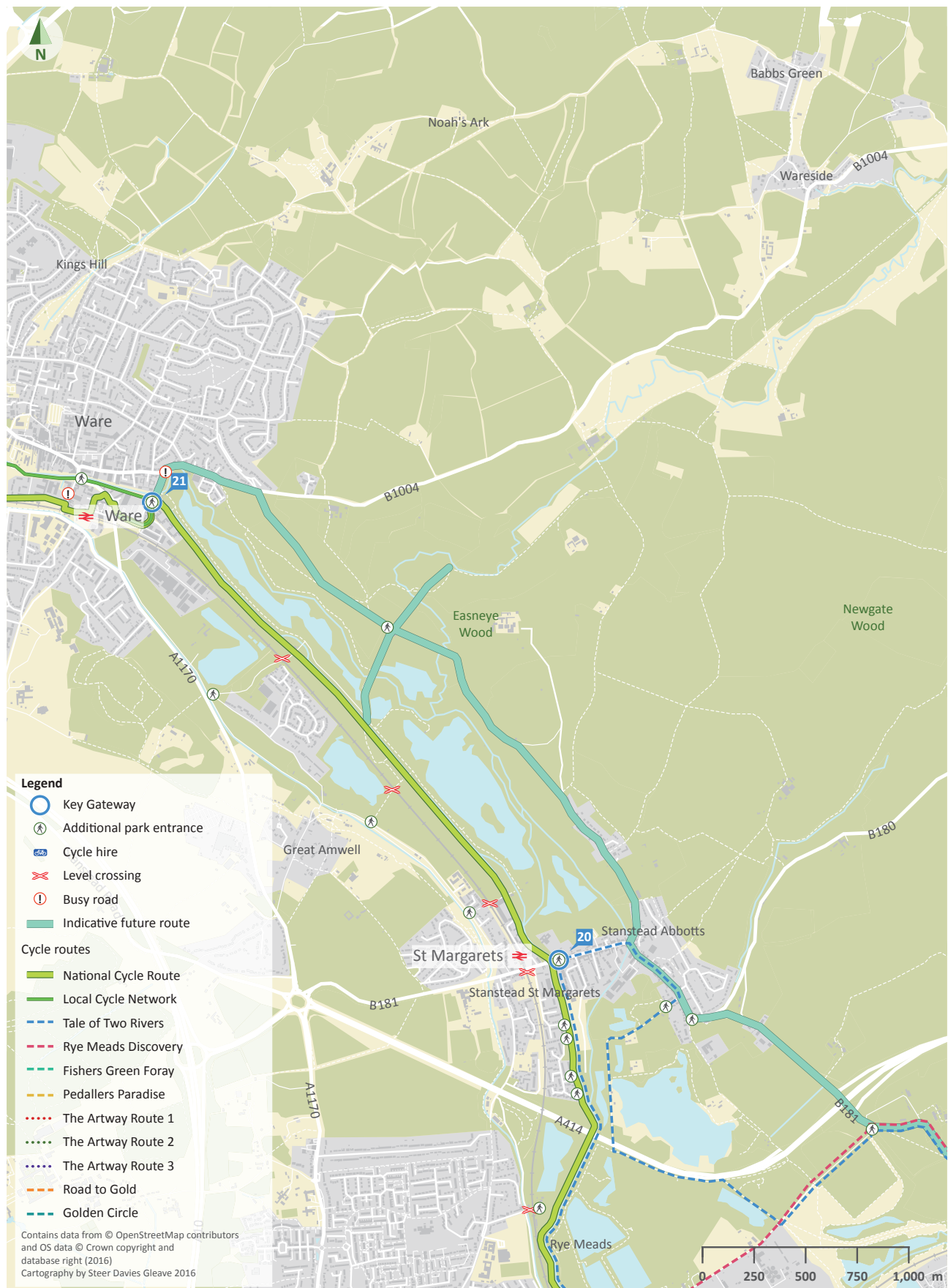
Monitoring and evaluating our progress

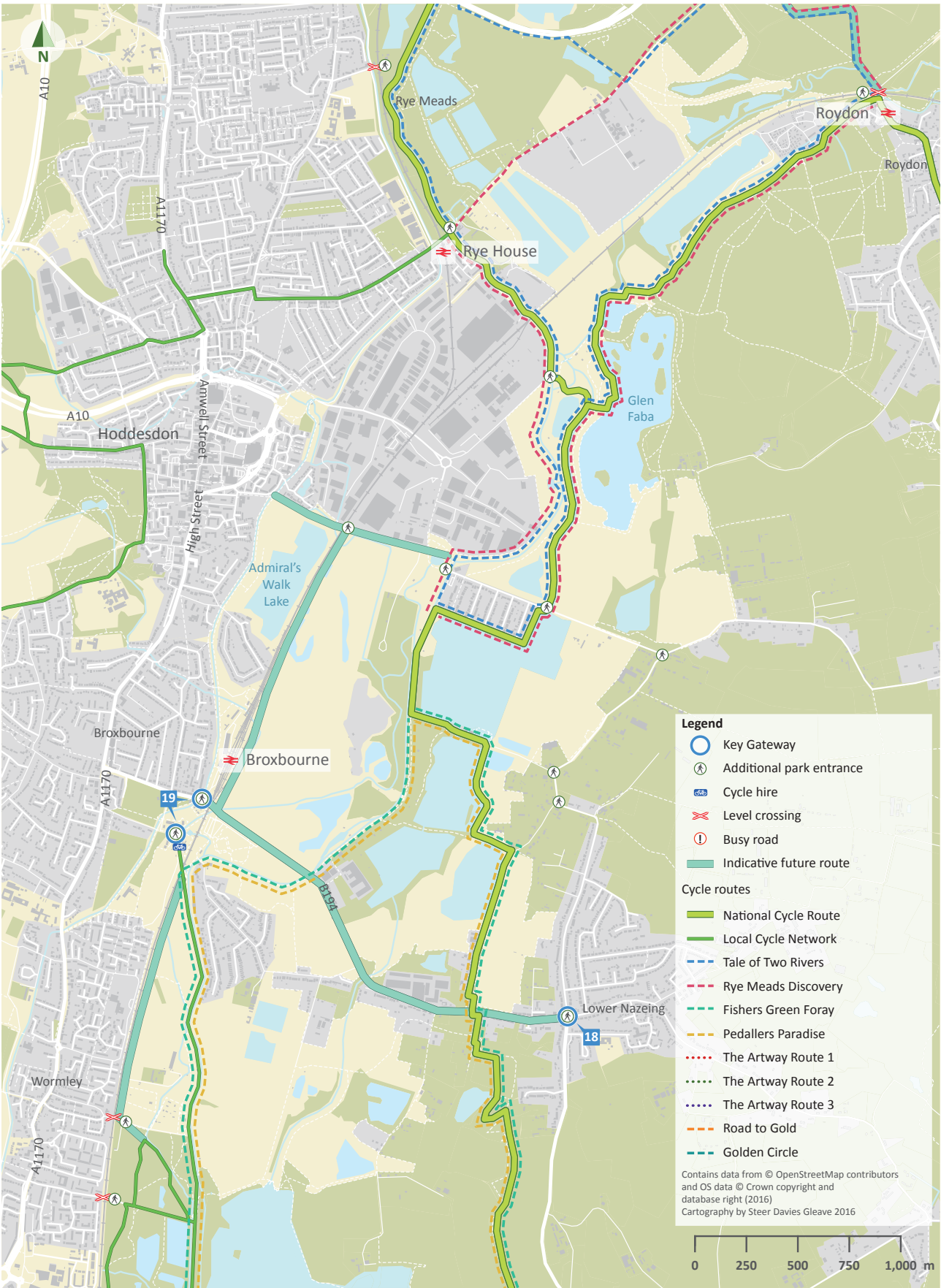
In order to be able to track our progress, we will implement several means of counting cyclists and gauging their experience of the Park:

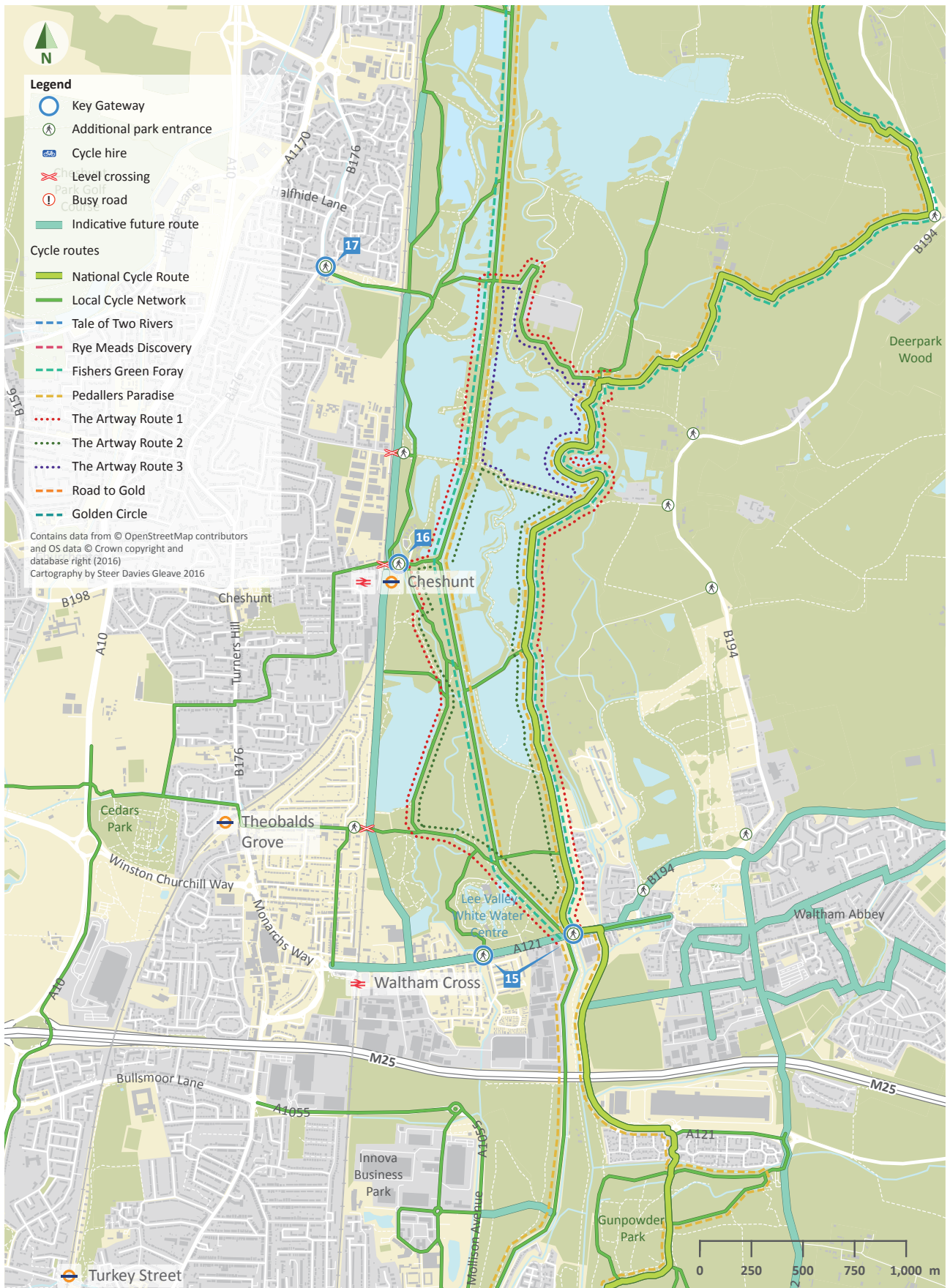
- Automatic cycle counters. Working with partners we will install automatic cycle counters at key gateways and locations in the Park. We will aim to install these before certain improvements are implemented to allow before and after data to be captured.
- Count of parked cycles at key venues. This measure will permit us to monitor the number of people who use a bike to access the following key venues:
 - Lee Valley VeloPark
 - Lee Valley Ice Centre
 - Lee Valley White Water Centre
 - Lee Valley Boat Centre
- Questions relating to cycling in annual visitor survey. We will include questions relating to the experience of cycling in the Park in our annual survey of visitors to the Park. This will allow us to gain a more qualitative sense of the experience of cyclists in the Park, rather than simply the number of cyclists visiting it. Specific questions relating to measures are detailed in the action plan.



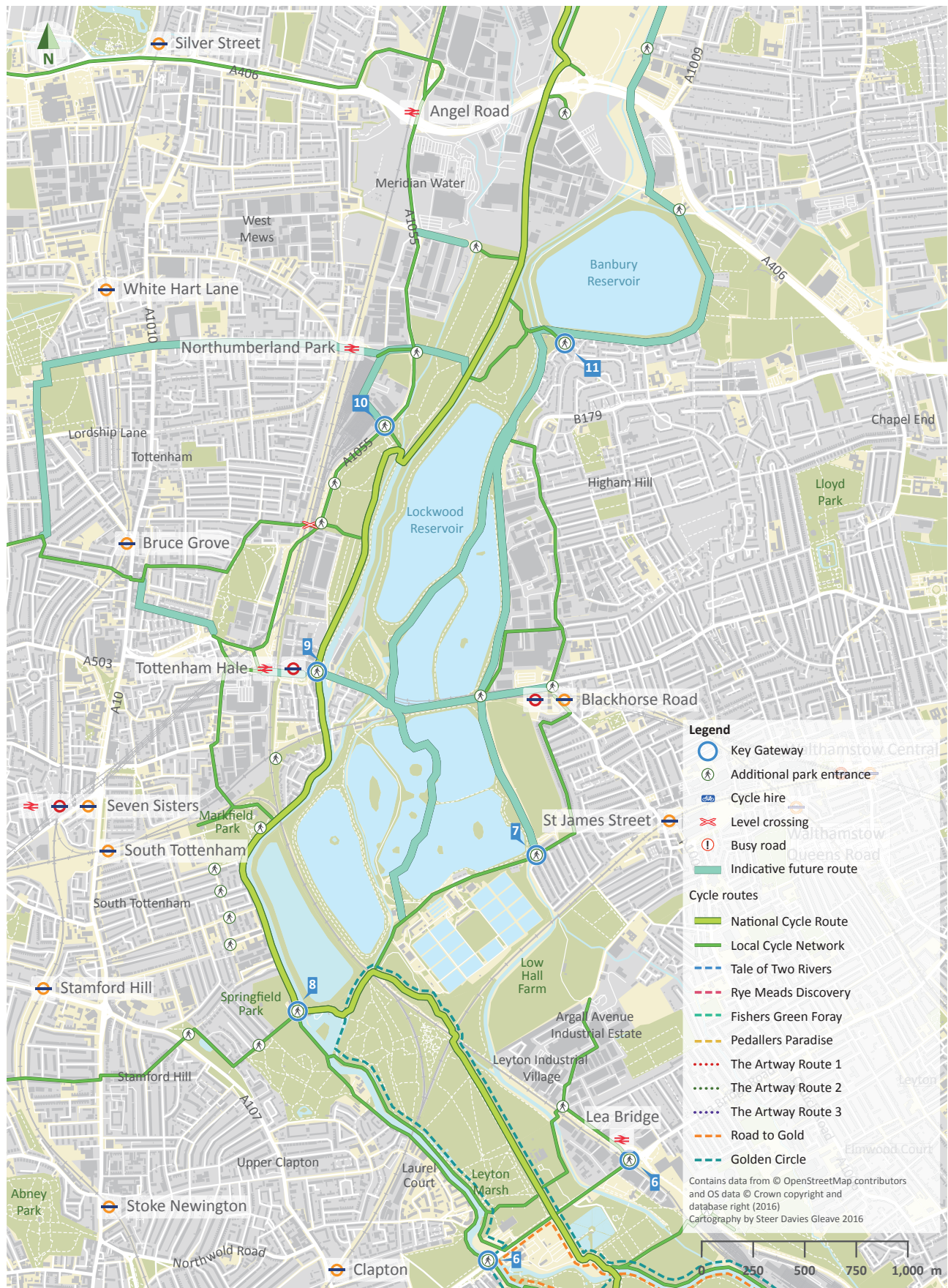
Appendix A: Cycle map of Lee Valley Regional Park













Prepared by:

Steer Davies Gleave
28-32 Upper Ground
London SE1 9PD
+44 20 7910 5000
www.steerdaviesgleave.com

Technical Support

We engaged the services of Steer Davies Gleave to co-ordinate and develop this cycling strategy.

