





4	Key Sites	68
4.1	Introduction	68
4.2	Ponders End Central	68
4.3	South Street Sites	73
4.4	Alma Estate	75
4.5	Ponders End Waterfront	78

4.1 Introduction

4.1.1 The NEE area has a limited number of potential development sites. The key opportunities are:

- Ponders End Central;
- sites in and around South Street;
- the Alma Estate; and
- Ponders End Waterfront.

4.1.2 This chapter sets out a description and analysis of each of these sites to support the development of principles and policies within the AAP.

4.2 Ponders End Central

4.2.1 The Ponders End Central Area is shown on Figure 4.1 opposite. It comprises three distinct zones:

- the area fronting onto the High Street, including retail buildings and the historic Swan Annex;
- the former Middlesex University campus site (also referred to as the Queensway Campus), incorporating the Broadbent listed building; and
- the Queensway Industrial Estate to the north.

4.2.2 The Council's Core Strategy defines the Ponders End Place Shaping Priority Area, of which Ponders End Central forms a part. Core Strategy Policy 41 sets out planning policy for the area, and sets out a range of objectives, including the following specific to Ponders End Central:

A holistic development at Ponders End Central incorporating the former Middlesex University campus, Queensway employment area, better use of land around the Tesco store and a vibrant, good quality local shopping centre and community hub, with vacant sites along Ponders End High Street redeveloped to complement the local offer.

4.2.3 The area is the subject of the Ponders End Central Planning Brief that was adopted as a Supplementary Planning Document (SPD) by the Council in May 2011. The AAP will replace some of the policies within the Planning Brief, and the Brief itself will be updated to reflect the changes made in the AAP.

4.2.4 Outline planning permission was secured for the residential-led mixed use development of the Queensway Campus Site and the land fronting onto the High Street in 2013. This scheme re-named the site the 'Electric Quarter' and permission was granted for:

- change of use of the Broadbent Building to residential and business uses;
- 404 residential units;
- retail; and
- a new library.

4.2.5 Subsequent to the grant of planning permission, the Queensway Campus site was sold by Middlesex University. A planning application is expected soon to bring forward a Free School on the site. The plans for a Free School significantly change the potential of Ponders End Central to deliver new housing and to meet all of the requirements of the adopted Planning Brief. However, the area fronting onto the High Street and Swan Annex continue to have potential for residential-led mixed use development, possibly delivering around 200 new homes. It is important that the AAP sets out policy for the future development of Ponders End Central that has regard to the adopted Planning Brief whilst taking into account the changes in circumstances.

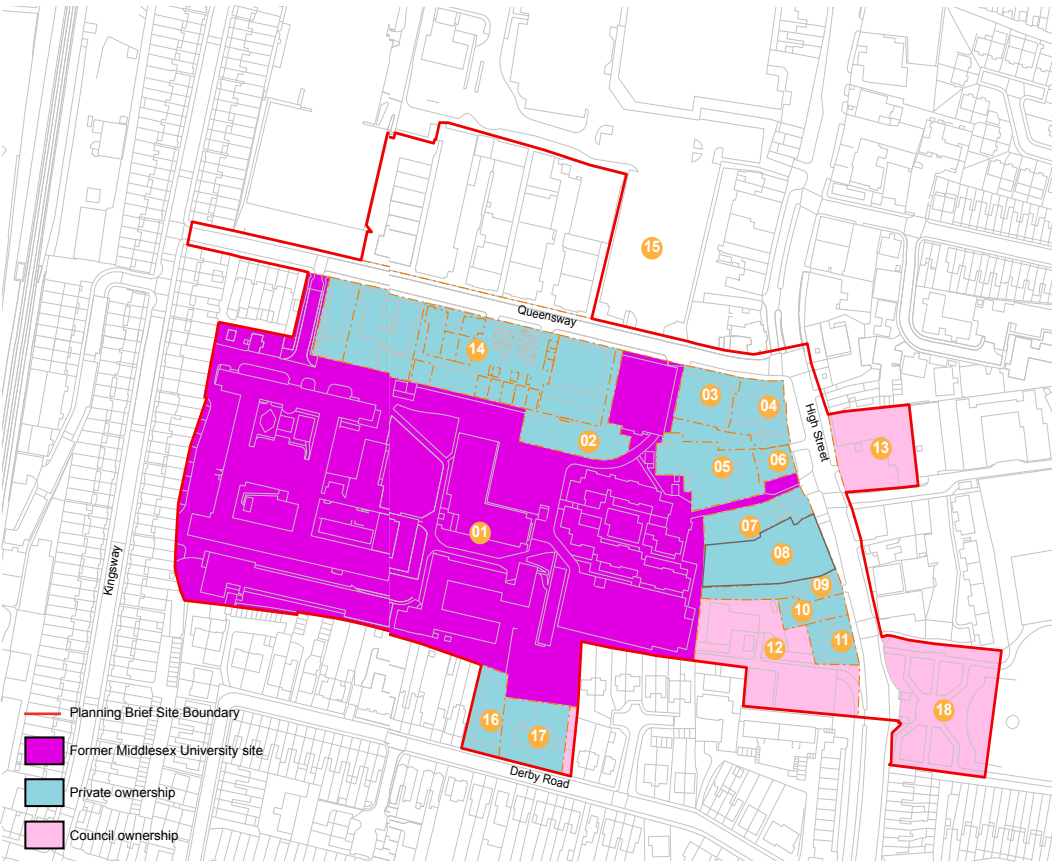
4.2.6 The Planning Brief sets out an overall vision for Ponders End Central, and this includes:

- Ponders End Central will be a more prosperous, inclusive, clean, green and stable place with a mix of architecturally excellent homes of different tenures and sizes, supported by key local services and community facilities for all ages and mobilities.
- The area will be better connected, with Ponders End and Southbury stations and the local bus network providing excellent transport links into central London and across the Borough. The provision of local services and jobs will reduce the need to travel thereby reducing carbon emissions.
- The town centre will be rejuvenated with support provided to businesses to enable them to build on their trademark personal service and goods to suit the diverse needs of the community
- Design will be high quality and sustainable, rooted in its historic context and respectful of the natural signature of the area. Development will be responsive to the existing built environment, to create a locally distinctive place whilst responding to the challenge of climate change.

4.2.7 This vision is supported by five principles:

- Green, playful and accessible streets, parks and public spaces that are rooted in their historic context.
- A healthy and welcoming neighbourhood with a mix of affordable homes for all.
- A lively, prosperous town centre with more jobs and improved local facilities for all.
- A well connected, inclusive and fair neighbourhood that's easy for everyone to move around.
- A lifetime, low-carbon neighbourhood that will stand the test of time and have minimal impact on the environment.

4.2.8 The conceptual masterplan sets out a spatial vision for the future of Ponders End Central and incorporates a set of principles as shown in Figure 4.2 overleaf.



Source: Ponders End Central Planning Brief

FIGURE 4.1 KEY

- | | |
|--|---------------------------------------|
| 01 University Site 1 | 10 198 High Street |
| 02 University Site 2 | 11 188-196 High Street |
| 03 20 Queensway | 12 Library and College Court car park |
| 04 232-244 High Street | 13 Swan Annex |
| 05 Land to the rear of 228 High Street | 14 Queensway Warehouse Buildings |
| 06 Mosque - 228 High Street | 15 Tesco car park |
| 07 216 High Street | 16 35-37 Derby Road |
| 08 Police Station | 17 31-33 Derby Road |
| 09 200-202 High Street | 18 Ponders End Park |

FIGURE 4.2: PONDER'S END CENTRAL ADOPTED PLANNING BRIEF CONCEPTUAL MASTERPLAN

01 Improved train service and access to Southbury Station.

02 Potential step-free pedestrian and cycle access to southbound platform at Southbury Station via Emilia Close.

03 A combination of off-street and on-street car parking. Around 0.75 spaces / home.

04 Queensway strengthened as a key employment and light industrial strip, with the addition of creative industries.

05 Employment uses towards the north of the site, close to Queensway or in workshop element of listed building.

06 Listed Broadbent Building converted within landscaped gardens.

07 Mews of tall, terraced family townhouses define street.

08 Potential new public pedestrian and cycle connection.

09 Taller building elements stepping down from the tallest point nearest the High Street towards the listed building.

10 Around 400-450 new homes or 427-480 habitable rooms per hectare on the Queensway Campus site.

11 Maximum heights of new buildings to respond to existing built form.

12 Potential new public vehicular, pedestrian and cycle access into Tesco from Queensway to alleviate congestion on the High Street.

13 Improvements to the junction of Nags Head Road and High Street.

14 Redevelopment of this section of the High Street providing 90-110 new homes including those above new shops. Taller elements mark civic uses or act as landmark features.

15 A revitalised High Street with events throughout the year, a deep clean, decluttering, and improved shop frontages. Takeaways resisted.

16 A mixed use development on the High Street, retaining as a minimum the original façade for its historic value.

17 Green Link enabling access into the Queensway Campus site and beyond to Southbury Station.

18 Improvements to the junction of South Street and High Street to include memorial to lives lost in the Two Brewers Pub, bombed during World War II

19 Public pedestrian / cycle connection into Ponders End Park towards the Lee Valley

20 Public pedestrian/cycle link into Queensway Campus site including parking re-provided in a 'home zone' style layout. Improved lighting, public realm, greenspace, and definition of College Court homes boundary

21 Public pedestrian/cycle connection

22 Mixed use development on part of the Tesco site and potential new access in.



Source: Ponders End Central Plan



Planning Brief

- Community
- Retail
- Housing
- Taller Residential
- Employment / Light Industrial



Ponders End Central: View towards Mosque



Ponders End Central: Ponders End High Street



Ponders End Central: Ponders End High Street



Ponders End Central: Library building



Ponders End Central: Aerial view of the central area of A1010 Ponders End High Street

4.3 South Street Sites

4.3.1 South Street has already begun to be transformed: public realm works have changed the character of the street, making it more pedestrian and cycle friendly and the completion of the Oasis Hadley Academy has created a new architectural and social landmark. A planning application has been approved for residential development at Dujardin Mews (formerly known as Academy Street) and this is due to start on site in 2014. The Council has selected a preferred development partner for the regeneration of the Alma Estate, and a planning application is expected to be submitted in 2014 with construction due to start - subject to securing planning permission - in late 2014.

4.3.2 However, the area still has a number of issues that need to be addressed and opportunities for improvement. Fig 4.3 overleaf sets out these issues, which include:

- the cluster of existing community uses (the MUGA, Youth Centre and Welcome Point) do not relate well to South Street and the buildings are of low scale and quality;
- the buildings on the Alma Estate relate poorly to South Street, and the green open spaces feel somewhat 'left over';
- Ponders End Station is unwelcoming, and the bridge providing links for pedestrians and cyclists is functional but unattractive;
- Dujardin Mews will introduce a new high quality street, with the buildings designed to positively terminate views
- In contrast, the student housing (Robbins Hall) on Gardiner Close is of very average quality and misses an opportunity to respond to the view southwards along Nelson Road. With the relocation of Middlesex University, this student housing is now remote from higher educational establishments and as such is not well located;
- the north side of Gardiner Close has exposed rear and side garden boundaries that are unattractive and vulnerable to crime;
- there is potential to redevelop Gardiner Close to reflect the character and quality of Dujardin Mews; and
- 171a and 171b South Street form a large triangular site next to Ponders End Station. 171b is vacant and 171a is occupied by a run down four storey apartment building. A planning application has been submitted to refurbish 171a and provide additional dwellings along Woodall Road.



The Oasis Academy Hadley introduces a high quality building into the area



The redevelopment of 171a and 171b South Street have the potential to transform the area around Ponders End Station.



Construction of new housing at Dujardin Mews will start in January 2014

FIGURE 4.3: SOUTH STREET AREA
- KEY ISSUES



4.4 Alma Estate

4.4.1 The Alma Estate is located to the north of South Street, close to Ponders End Rail Station. It is 10 minutes' walk from the shops and facilities on Ponders End High Street. The new Oasis Hadley Academy School lies to the south. However, despite its good location, the Alma Estate has a number of problems. It does not provide good quality accommodation, and many of the buildings are unattractive. The Council has identified the regeneration of the Estate as a key part of the Ponders End Improvement Area, and a successful scheme has the potential to transform the image and identity of the area.

4.4.2 The Council has selected a development partner to undertake the regeneration of the Alma Estate. The process of selection involved developers producing an initial masterplan for the scheme based on principles set by the Council. A planning application for the scheme is expected to be submitted in 2014.

4.4.3 Pre-applications negotiations are underway on the preferred developer's scheme, and some changes and refinements are expected prior to the application being submitted. The AAP therefore sets out principles for the regeneration of the estate that reflect the Council's aspirations for the area as set out in the Brief to developers. The principles in the AAP have been informed in part by an updated urban design analysis of the estate and its context, and this is set out overleaf.














View eastwards along South Street towards the Alma Estate towers.



Alma Estate: Retail parade on South Street

<<< FIGURE 4.3 KEY

-  Exposed rear and side garden boundaries
-  Pedestrian route requires improvement
-  Negative view: dead end to street
-  Positive frontages
-  Weak building frontages that do not relate well to surrounding streets
-  Boundary to school has constraints: security, overlooking and noise
-  Noise pollution from railway
-  Pedestrian improvements required; Ponders End Station and link to Wharf Road (onto LVRP) are low quality and do not encourage East-West movement
-  Oasis Academy Hadley School
-  Green space
-  Proposed development at Dujardin Mews



Alma Estate: aerial view from west

4.4.4 The plan opposite identifies the key constraints and opportunities that any redevelopment needs to address. These include:

- the estate does not connect well into the surrounding area: it feels isolated. There are opportunities to provide new linkages and improve existing ones;
- buildings on the estate do not relate well to roads, South Street and Alma Road in particular. There is an opportunity to design new building frontages to define and enclose streets in a more positive way;
- the rear garden boundaries of surrounding residential properties backing onto the estate are exposed. There is an opportunity to improve security for residents by backing new development onto these boundaries;
- the railway line is noisy: any new development will need to be designed to minimise the impact of noise on residents;
- there are existing trees within the estate that should be retained and integrated into the new development;
- the area is not easy to understand - there are opportunities to improve this by providing views to local landmarks such as the station, and by creating an easy to understand; and
- the green spaces between buildings feel 'left over' - there is an opportunity to design new green space that is better integrated into the redevelopment.

4.4.5 The regeneration of the Alma Estate is a major opportunity to transform the image and identity of the area. Architectural and public realm design must be of the highest quality. Improved linkages both within the area and to Ponders End High Street, the Lee Valley Regional Park and to Pickett's Lock to the south are critical. Section 3 of this Baseline Update provides more detailed analysis of the Ponders End Station area, identifying opportunities for improved connections.



Above and below: images from the preferred developer's bid showing how the Alma Estate could look once it is regenerated.



FIGURE 4.4 KEY >>>



Pedestrian improvements required; Ponders End Station and link to Wharf Road (onto LVRP) are low quality and do not encourage east-west movement



Building frontages do not relate well to Alma Road or South Street



Green spaces tend to feel 'left over' and are fragmented



Poor quality pedestrian embankments to bus stops on Lee Valley Road



Existing building to be retained. Must be sensitively incorporated into new layout



Noise pollution from high frequency trains



Exposed rear garden boundaries



Schools are key local landmarks and destinations



Cluster of community facilities



Existing trees to be retained and integrated into development (approximate locations)

FIGURE 4.4: ALMA ESTATE - KEY ISSUES



4.5 Ponders End Waterfront

4.5.1 Ponders End Waterfront is a hidden gem: it is one of the most historic parts of the NEE area, has access to the Lee Valley Navigation and access to the Lee Valley Regional Park. However, it is difficult to get to and - with the exception of the Navigation pub - there are few attractions for local people or visitors from the wider area. It has the potential to connect the wider NEE area with the River Lee Navigation and the open spaces of the Lee Valley Regional Park.

4.5.2 The Council has undertaken previous work on the area, and this is outlined in the 2009 Ponders End Framework for Growth document. The Framework for Growth was intended to support the production of Planning Briefs for different parts of the Ponders End area, of which Ponders End Waterfront was one. In the event, a Planning Brief has not been produced and there is an opportunity for the AAP to provide planning policy guidance for the area.

4.5.3 Figg 4.5 shows the land ownership of the Ponders End Waterfront area. Figure 4.6 overleaf sets out the planning policy designations that affect the area along with urban design constraints and opportunities. The key planning policy issues are:

- East of Mollison Road: almost all of the green space east of Mollison Road is designated as Green Belt. All of the open space is designated as Lee Valley Regional Park;
- all of the open space between the watercourses is defined as a Site of Metropolitan Importance for Nature Conservation;
- the Ponders End Flour Mills Conservation area is situated in the south-west of the area, and it includes a number of listed buildings;
- the Navigation Inn is a listed building;
- the northern part of the area is designated as a Strategic Industrial Location (SIL); and
- all of the area lies within the Ponders End Place Shaping Priority Area.

4.5.4 A review and update of the Conservation Area Character Appraisal for the Ponders End Flour Mills was undertaken in 2013. The site has been in continuous use as a flour-mill since the first records in the 13th century. Wright's Flour Mill continues to operate, and so the area is inaccessible to the public. The flour mill has been in the ownership of the Wright family since 1863, and family members continue to live on site.

4.5.5 Approximately half the area of the site, to the south-west, is occupied by the mill and its ancillary buildings, with the remainder as water-meadow. The area may only be viewed from high ground, such as from the Ponders End Station footbridge. These views emphasise its 'island' form

(and the division of the River Lea into two streams within the site provides the effect of a real island within).

4.5.6 The core group of late 18th century buildings comprises Mill House, the mill offices, the mill itself and the former barn to the south. All of these are Grade II listed.

4.5.7 The Conservation Area Appraisal states that 'The mill has been used for some time for the mixing, packing and testing of ready-made flour mixes for home baking, but it is difficult to maintain necessary health and safety standards in the old building due to the age and nature of the structure and finishes. This operation will therefore move to a new off-site facility shortly, leaving the mill empty and with no current plans for an alternative use.' However, this is contradicted by the owners who have indicated that the flour mill will continue to operate, although the business does have plans to expand into other sites in the area.

4.5.8 A major part of the site is open and consists of rough grass and water-meadow, bounding the two streams of the River Lea around which the mill complex is arranged. This area and the contrast it forms with the surrounding industry and transport infrastructure is an essential constituent of the character of the Conservation Area, not only because of its historic associations with the mill as the original source of power, but also for the opportunities it provides for views in and out of the built-up area within the sit

FIGURE 4.5 KEY >>>







	Ponders End Waterfront Area
	Thames Water
	Scottish Widows
	Canal and River Trust (formerly British Waterways)
	Wright's Flour Mill
	Mitchells & Butler

FIGURE 4.5: PONDERS END WATERFRONT - LAND OWNERSHIP



4.5.9 The Council has undertaken a Level 2 Strategic Flood Risk Assessment (SFRA) for the area to help inform planning policy. This SFRA includes mapping showing that much of the area lies within Flood Zone 3a. This zone is defended and so development - including residential - is possible within the area subject to the other planning policy constraints listed above. Some parts of the area are Flood Zone 2. A sequential test would need to support the development of any residential at Ponders End Waterfront, demonstrating that there are no other suitable sites.

4.5.10 Place Shaping Priority Area policy encourages seeks a new mixed-use, employment, leisure and residential community at Ponders End Waterfront of exceptional quality, including sites at the southern part of Brimsdown and Columbia Wharf, helping to reconnect the Ponders End Community with its waterfront and contributing to the chain of attractions along the Lee Valley Regional Park.

4.5.11 However, development opportunities are limited to the north of the area, in the area known as Southern Brimsdown.

4.5.12 Figure 4.6 opposite sets out the key issues that must be taken into consideration in any plans for the future:

- the heart of the area is the Ponders End Flour Mills Conservation Area, which encompasses the operational Wright's Flour Mill and the open space and water meadows next to the River Lea. There is no public access to the Conservation Area, and the Mill will remain in private use for the foreseeable future. Further details of the Conservation Area are provided overleaf;
- there are two main opportunities for pedestrian access from the wider NEE area: via the footbridge at Ponders End Station and the footbridge at Duck Lees Lane. However, the route via Duck Lees Lane involves crossing the very busy and unfriendly Mollison Avenue and there is no link across the waterway to the green space;
- vehicular access to the southern part of the area is via the major Lee Valley Road and then Wharf Road. This is rather a confusing approach from the west, as it involves doubling back. However, the Lee Valley Road is elevated and so there is no way of providing more direct access for cars;
- vehicular access to the north part of the site (Southern Brimsdown) is off Mollison Avenue at East Duck Lees Lane. This is a left-in, left-out junction only and so is somewhat restricted. A further vehicular access may be possible from Jeffreys Road to the north; and
- whilst some of the industrial buildings within Southern Brimsdown are of good quality, the majority are low quality and run-down. This partly reflects the aspirations of the landowner to redevelop the site. These industrial buildings are located close to the water's edge, so preventing access. The Council has developed a strategy to require pedestrian and cycle access along the water's edge when sites come forward for redevelopment;



Aerial view of Ponders End Waterfront

FIGURE 4.6 KEY >>>

- Place Shaping Priority Area (Core Strategy - Proposals Map)
- ★ Ponders End station
- ➔ Pedestrian/cycle crossing of railway
- ➔ Under utilised views
- Existing cycle route
- ■ ■ Noise from major road
- ■ ■ ■ ■ ■ ■ ■ ■ ■ Noise from railway line
- ■ ■ ■ ■ ■ ■ ■ ■ ■ Lack of waterside frontage
- ■ ■ ■ ■ ■ ■ ■ ■ ■ Green spaces
- ■ ■ ■ ■ ■ ■ ■ ■ ■ Protected open and green spaces covered by various policies
- ■ ■ ■ ■ ■ ■ ■ ■ ■ River Lee waterways
- ■ ■ ■ ■ ■ ■ ■ ■ ■ SSSI - Chingford Reservoirs
- ■ ■ ■ ■ ■ ■ ■ ■ ■ Low quality industrial units
- ■ ■ ■ ■ ■ ■ ■ ■ ■ Existing listed buildings
- SIL boundary
- Ponders End Flour Mills Conservation Area boundary

FIGURE 4.6: PONDERS END WATERFRONT - KEY ISSUES







5	Movement and Accessibility	84
5.1	Urban Design Analysis – Transport and Movement	84
5.2	Highways, Movement and Accessibility	89

5.1 Urban Design Analysis – Transport and Movement

Connections to Facilities

5.1.1 The qualitative and quantitative update on the socio-economic profile of the area has identified the following issues pertaining to connectivity to the existing social infrastructure:-

- Support for Enfield's industrial sites – North East Enfield's (NEE) industrial hub and locational advantages (London-Stansted-Cambridge corridor) make it a key driver of growth in area.
- The provision of affordable housing for continued regeneration of the area.
- Planning of the location of childcare and early years' services and accessibility.
- Continued partnerships and collaboration between the Council, local centres, community and businesses with regards to the Borough's education, skills and employment strategy in relation with the residential developments.
- A transport and accessibility strategy designed to improve the safety; accessibility and connectivity of the area as well as accommodate work patterns of local businesses including:
 - Continued improvements to public transport, pedestrian and cycle access are seen to be crucial to unlock benefits arising from NEE's local centres and retail offering and make the area a more attractive place to live.
 - This will also promote accessibility to jobs for NEE residents and allow the Borough's growing employers to be able to attract a greater proportion of applicants locally.
 - Improving the transport links, accessibility options, and reducing the reliance on private vehicles for relatively short journeys will help ease congestion on the A1010 Hertford Road corridor seen as crucial for connectivity for NEE's industrial sites and wider area.

Local Centres and High Streets

5.1.2 There are large local centres at Ponders End, Enfield Highway and Enfield Wash. These all lay on the A1010 to the east of the NEEAAP study area.

5.1.3 Enfield Wash local centre includes a Co-op supermarket to the north and the Abbey Leisure centre to the south. South of Longfield Avenue, there are parallel access roads between the shop frontages and the highway which has dedicated parking bays along each side. Parking here is free although there are time restrictions. North of this point there is no dedicated parking except for the Co-op car parking, and there are double yellow lines in place either side of the

carriageway. Pedestrian provision is good here with wide pavements and crossing facilities.

5.1.4 Enfield Highway local centre also has stretches of access roads between shop frontages and pavements which are used for pay and display parking. Some of the buildings do have servicing areas to the rear, but access is difficult as many are narrow and in poor condition. There is a smaller Co-op store alongside a selection of smaller shops and services in this area. Some good quality bus shelters are provided and there are small allocations of Sheffield Stands.

5.1.5 Ponders End High Street local centre also has some stretches of access roads between shop frontages and pavements which are used for parking. There is some cycle parking here, including outside of Tesco and near to the mosque. High quality bus shelters are provided at bus stops. Rest points are provided along the route including some in the public realm around the Tesco store. Some on-street parking bays are provided although there is a charge and many visitors appear to park on the side streets. Toward the south of the local centre there is a high quality area of public realm at the Ponders End Park access. Smaller local centres can be found at Freezywater and Enfield Island Village.

FIGURE 5.1 KEY >>>

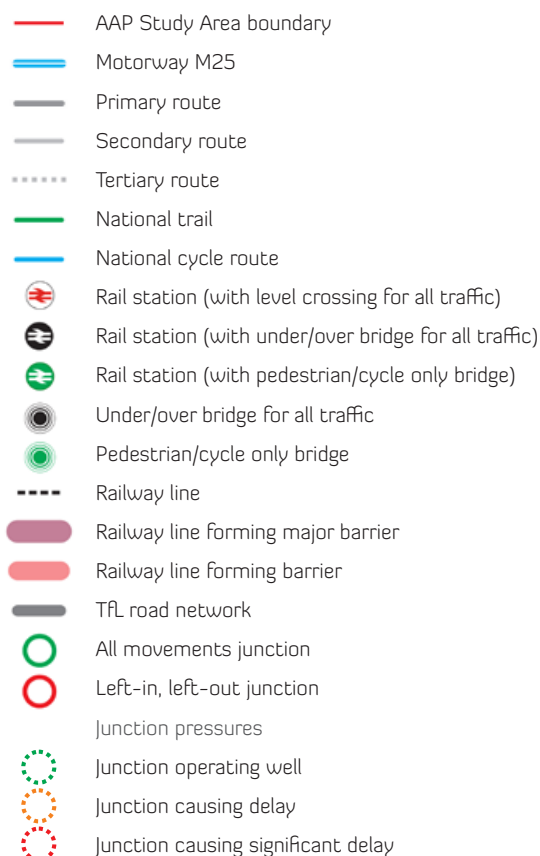
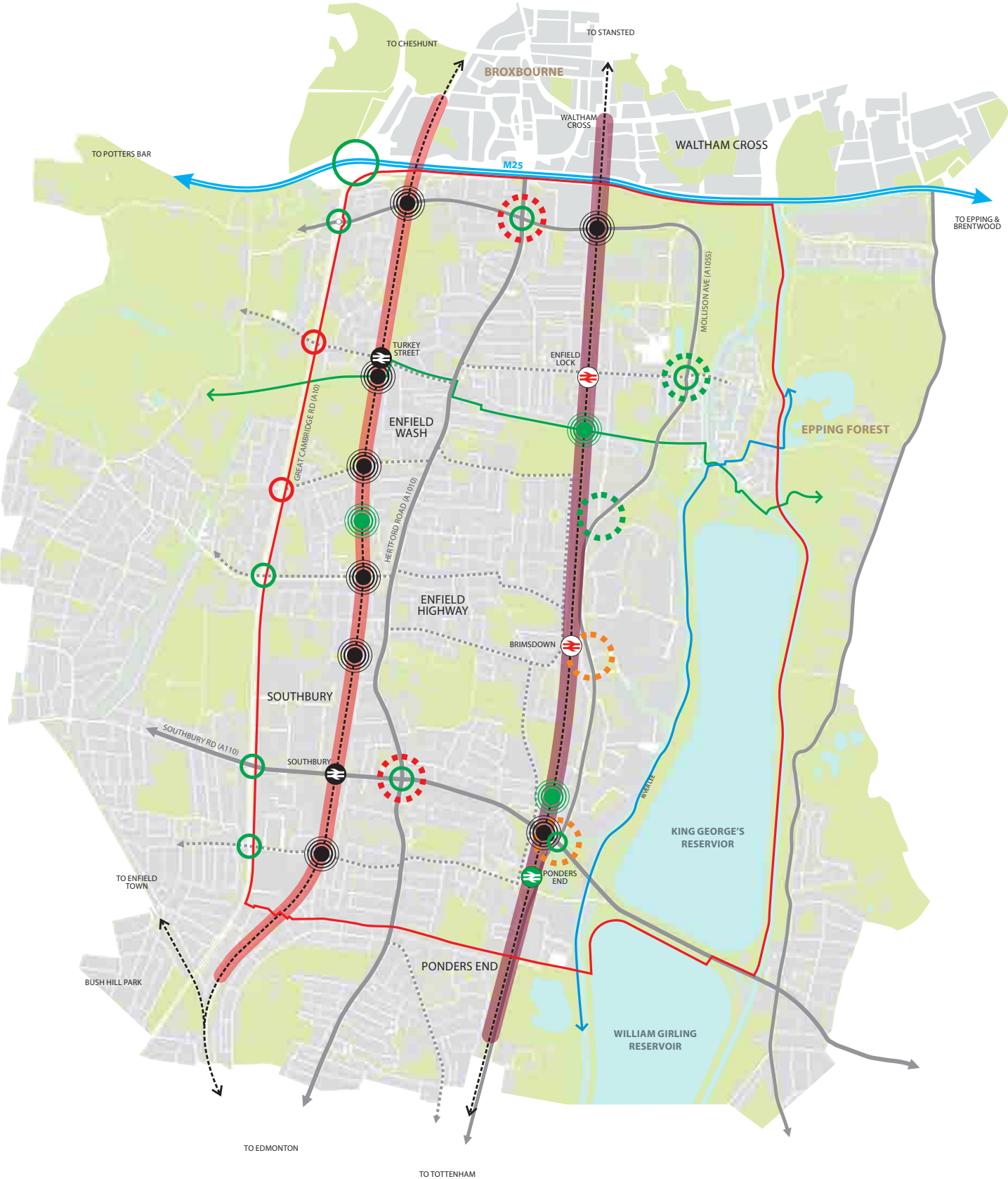


FIGURE 5.1: KEY TRANSPORT ISSUES



Public Transport

5.1.6 The current situation shows strong north to south links on Great Cambridge Road and Hertford Road and also towards Enfield Town Centre. The bus services provide moderate penetration of residential areas, typically on 10 minute frequencies. Further, the bus routes provide a moderate connectivity to the Brimsdown industrial estates. The east-west links are poor largely limited to the Lee Valley Rd (A110), due to severance created by Lee Valley rail line.

5.1.7 The following bus routes pass through the NEEAAP study area:

- Route 121 - with a peak frequency of six buses per hour; this route terminates to the east of Enfield Lock after routing through Enfield and past Southbury and along the A1010.
- Route 191 - with a peak frequency of six buses per hour; this route terminates near Brimsdown Station after routing from Edmonton Green via Ponders End, Southbury, Enfield Town, Forty Hill and then Enfield Wash.
- Route 217- with a peak frequency of five buses per hour; the route follows the A10 through the study area linking Waltham Cross and Turnpike Lane.
- Route 231- with a peak frequency of four buses per hour; this route from Turnpike Lane follows the A10 from the south of the NEEAAP study area as far north as Southbury Road where it continues in the direction of Enfield Town.
- Route 279- with a peak frequency of 10 buses per hour; this route passes directly through the NEEAAP study area along the A1010, linking to Waltham Cross and Edmonton Green at either end.
- Route 207- with a peak frequency of six buses per hour; the route enters the NEEAAP study area from Enfield Town, routing via Southbury to terminate near to Brimsdown Station.
- Route 313- with a peak frequency of three buses per hour; this route passes across the NEEAAP study area in an east-west direction connecting Enfield Town and Chingford Green.
- Route 327 - with a peak frequency of two buses per hour this route enters the NEEAAP study area from the north, forms a loop around Turkey Street and then leaves the NEEAAP study area to the north again, towards Waltham Cross.
- Route 349 - with a peak frequency of eight buses per hour this route terminates near to Southbury Station, entering the study area from Edmonton Green.
- Route 377 - with a peak frequency of two buses per hour this route enters the NEEAAP study area from Bush Hill Park and terminates near to Southbury Station.

- Route 491 - with a peak frequency of four buses per hour; this route crosses the NEEAAP study area from the Edmonton Green routing via Southbury, Ponders End, Enfield Lock and then out of the study area towards Waltham Cross.
- Route 317 - with a peak frequency of three buses per hour; this route follows the A10 along the western border of the NEEAAP site connecting to Waltham Cross and Enfield Town at either end.

5.1.8 Whilst at first sight, there are significant numbers of bus services serving the area, on detailed analysis, certain patterns begin to emerge. These inform us of the issues pertaining to the current public transport provision and are summarised below:

- Links to Brimsdown employment areas from residential catchment, e.g. Ponders End, Enfield Wash;
- Lack of penetration of buses towards Brimsdown industrial estates;
- Links for new residential and leisure development in Brimsdown;
- Lack of east-west links;
- Indirect and circuitous routes, e.g. 191 between Brimsdown and Edmonton;
- Impact of possible level crossing closure at Enfield Lock on service 121 to Island Village.

FIGURE 5.2 KEY >>>

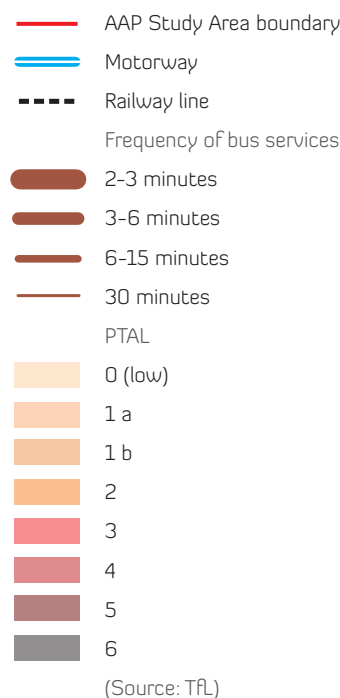


FIGURE 5.2: PUBLIC TRANSPORT ACCESSIBILITY

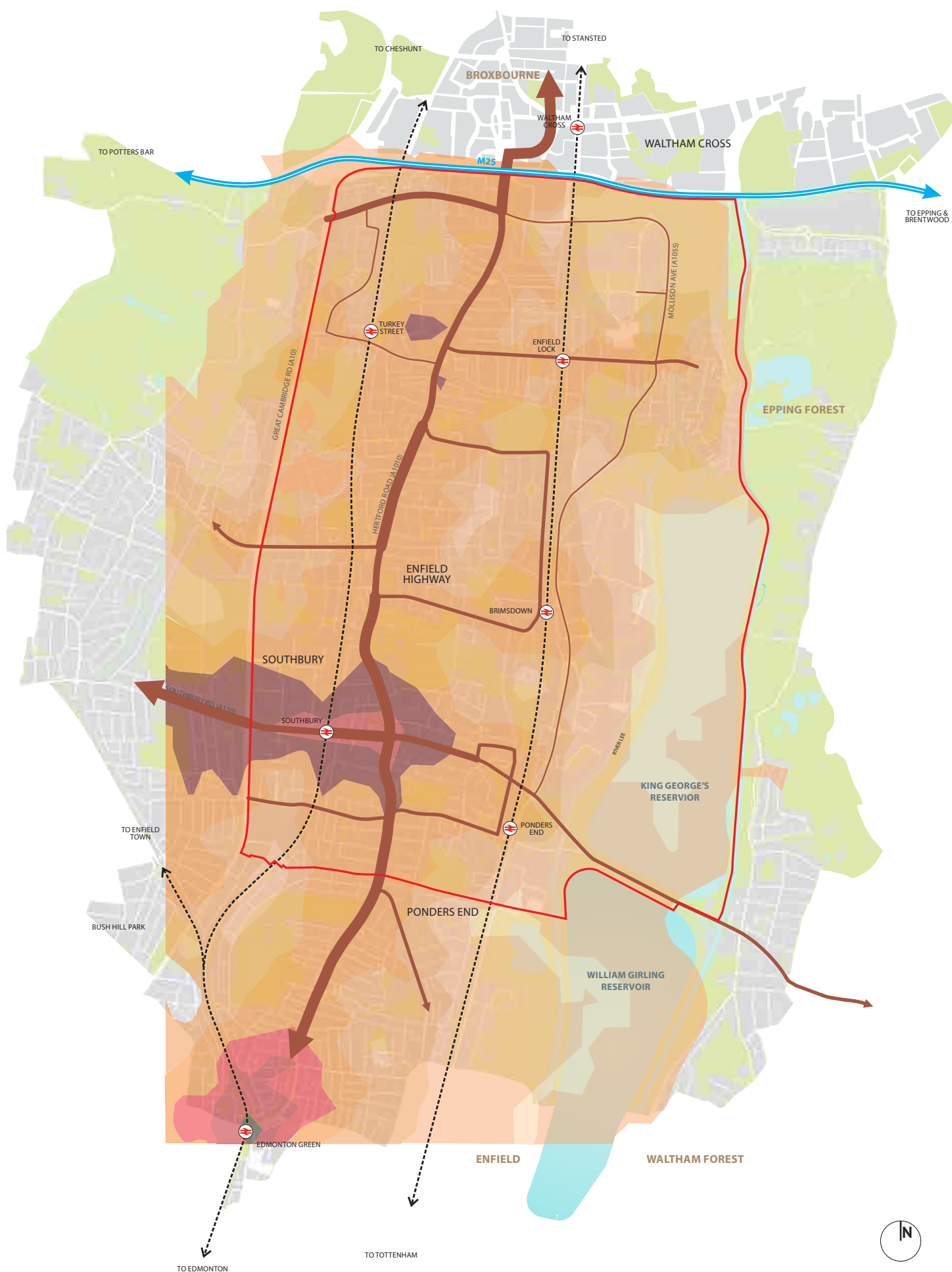
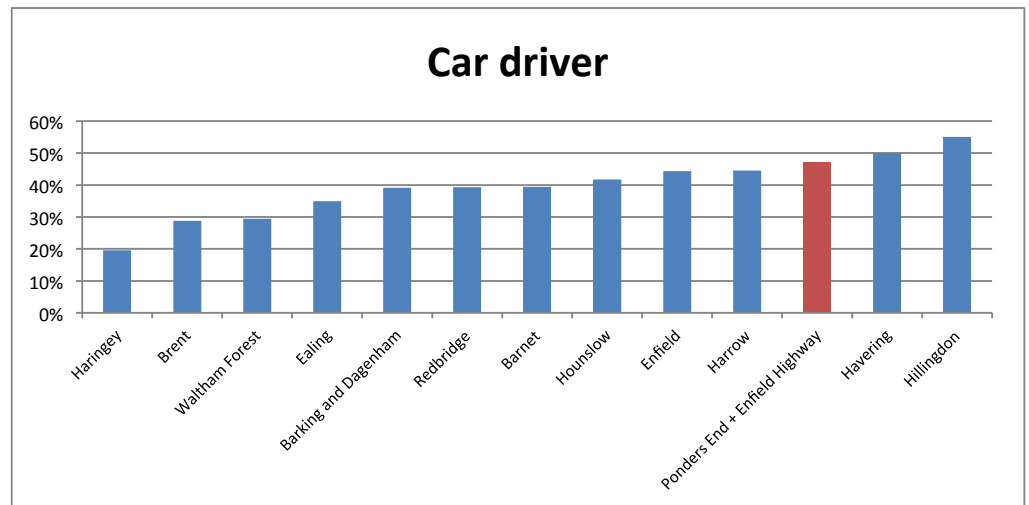
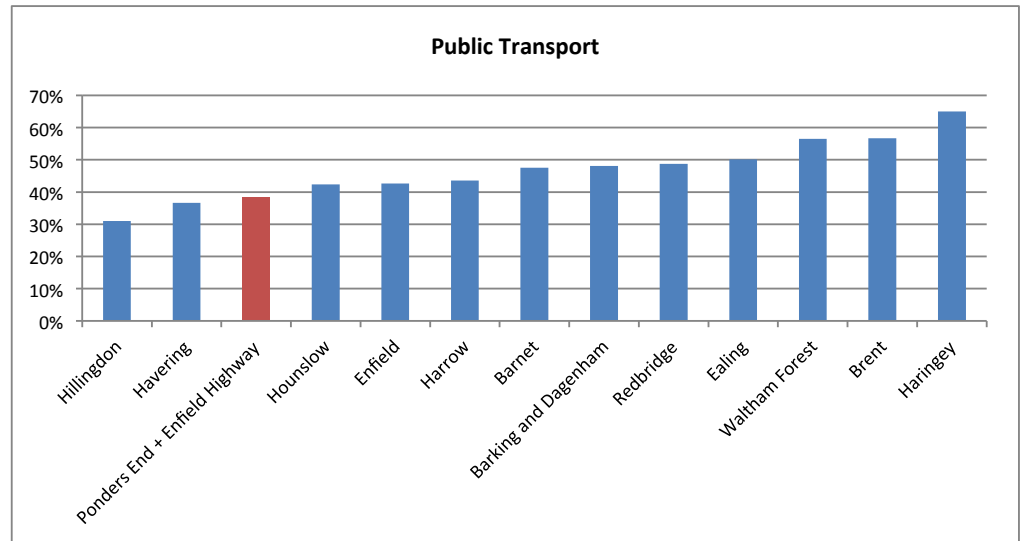


FIGURE 5.3: COMMUTER TRAVEL CHARACTERISTICS

5.1.9 The potential solutions could be a combination of or part of the following:

- Extension of services 349 and 377 from Ponders End bus garage further into NE Enfield;
- Possible recast of services 191 and 307 to simplify routes;
- If Enfield Lock level crossing is closed, recast of services: service 121 to terminate at Enfield Lock or re-route via Mollison Ave; alternative service is required for either Island Village or Ordnance Road as a result;
- Increased frequencies on north-south corridors where justified by demand and as part of future developments;
- New services – although this would require a strong business case and further evidence of additional demand.

Travel Characteristics

5.1.10 The NEE study area covers two wards- Enfield Highway and Ponders End. Census data from the 2001 census is available to compare travel to work for both residents and workers of Ponders End and Enfield Highway. Of the residents living within these wards approximately 51% of workers drive to work. Of the people working in these wards approximately 68% drive to work, with only 15% using public transport as opposed to the 31% of residents who use public transport to get to work. Implementation of workplace travel plans may therefore be more effective at tackling peak traffic than imposing restrictions upon residents.

5.1.11 The 2011 Census data for residents' mode of travel to work has been used to estimate the use of private cars for commuter trips. In the Ponders End and Enfield Highway wards, on average 47% of residents were driving to work representing a decrease in car drivers since 2001. This is higher than the average car use by other outer London boroughs for commuting (38%) and also higher than Enfield overall (44%). The data also showed a share of approximately 38% using public transport for commuting which is slightly lower than Enfield overall (43%) and lower than the average of other outer London boroughs (48%).

5.1.12 The average level of car ownership within the NEEAAP boundary is approximately 93% according to the 2011 Census. This is lower than the Enfield average which is 99.8% car ownership.

5.1.13 The car ownership for NEEAAP study area is high compared with other Outer London boroughs and it is found that the car ownership is higher than some surrounding boroughs such as Havering (60.3%) and Waltham Forest (78.7%). On an average all other outer London boroughs have a car ownership of 99%.

5.1.14 This high level of car ownership and reliance on cars as a method of travel to work indicates a need to consider highways connections and parking provisions in any proposals taken forward. It also highlights the need for a shift in travel behaviour to allow the area to develop further.

5.2 Highways, Movement and Accessibility

Movement and Access across the NEEAAP Boundary

5.2.1 In terms of public transport, many of the bus routes provide north to south links. Route 191 provides the east-west linkages across the study area by linking Brimsdown via Enfield Wash to Carterhatch Lane and then back into the study area from Southbury to Ponders End.

5.2.2 For cyclists there is an existing east-west linkage following Longfield Avenue and Turkey Brook. This provides a link between national Cycle Route (NCR1) which runs alongside the reservoirs and the key commuter cycling route alongside the A10. The commuter cycling route along Mollison Avenue is also crossed by this east-west cycle link.

5.2.3 The northernmost east-west connection is Mollison Avenue/ Bullsmoor Lane which runs to the northern edge of the NEEAAP boundary. Bullsmoor Lane routes over the railway line north of Turkey Street, while Mollison Avenue routes under the eastern railway line north of Turkey Street.

5.2.4 The other main highways connections across the western railway line through Turkey Street and Southbury are as follows:

- at Turkey Street Station the railway line runs across a bridge over Turkey Street;
- further south on this railway line, Hoe Lane forms a bridge over the railway lane;
- Carterhatch Lane forms a wide bridge with two lanes in each direction just south of this; and
- Southbury Road on which Southbury Station is located forms a bridge over the railway with one lane of traffic flowing in each direction.

5.2.5 The other main highway connections across the eastern railway line through Enfield Lock, Brimsdown and Ponders End are as follows:

- Ordnance Road has one lane of traffic in each direction and meets the railway at a level crossing just outside of Enfield Lock Station; and
- Green Street also crosses the railway line at a level crossing just outside of Ponders End Station.

5.2.6 If these two level crossings are closed for increased train frequency then alternatives will need to be considered to facilitate east to west movement across the NEEA.

5.2.7 Pedestrians may use the highway connections across the railway lines, in particular reasonable pedestrian provision is provided on Carterhatch Lane where there is a wide pavement and good quality public realm. Southbury Station provides a pedestrian refuge island on the bridge to allow pedestrian's easier access to the station.

Current Transport Proposals and Initiatives - Northern Gateway Access Package (NGAP)

5.2.8 The Northern Gateway Access Package (NGAP) is a major project that aims to coordinate a package of transport improvements to transform access within the NEE area and to the wider area.

5.2.9 NGAP will coordinate transport improvements across NEE as a whole with the aims of:

- improving connectivity by all modes for existing businesses and residents;
- enhancing Brimsdown and other parts of North East Enfield as a place to do business;
- addressing existing transport impacts, including severance, congestion and poor air quality; and
- ensuring that the necessary transport infrastructure is in place (including pedestrian and cycle infrastructure) to support planned population and employment growth in North East Enfield and the wider Upper Lee Valley.

5.2.10 NGAP will include:

- the West Anglia Mainline Enhancement Project which will expand of the eastern rail corridor from two railway tracks to three or four, so increasing capacity and allowing for the potential Crossrail 2 project.
- a package of restraint measures to limit general traffic growth and discourage car trips towards central London;
- the West Anglia Mainline Enhancement project, along with measures to retain and improve local connectivity for pedestrians, cyclists, buses and local car journeys;
- improved access to local railway stations;
- new and/or improved bus routes; and
- a new link between the A1055 and the A121 to connect to junction 26 of the M25, mitigating the impact of the scheme in Ramney Marsh as much as possible. This has the potential to significantly improve access onto the M25 and beyond from key industrial areas, and direct heavy vehicles away from residential areas. The link is known as the Northern Gateway Access Route (NGAR).

5.2.11 The NGAR element of NGAP aims to relieve traffic pressures at three junctions: Junction between M5/ M25; A10/ Bullsmoor Lane junction; and A1010/ Bullsmoor Lane junction. The key junctions are already operating above capacity and as a result causing significant delays at peak periods. A1055 in particular is carrying an average of 22,000 vehicle movements a day. There is a high proportion of HGVs using the corridor which can cause problems like poor air quality and community severance. Reduction of HGV traffic on Bullsmoor Lane is particularly highlighted in the proposal.

5.2.12 In a wider context, NGAP serves to improve accessibility and movements within the North East Enfield to support existing and new businesses in the Upper Lee Valley. This north-south access routes can service many employment sites and activities as well as to access a variety of residential communities. In particular, access is important to support the development of Brimsdown as an important business centre.

5.2.13 Planning permission on the original planned Northern Gateway Access Road (NGAR), which was a proposed road crossing to link A1055 with the Meridian Way and access M25, was rejected in 2001. However, the Core Strategy sets out in Policy 24 that the Council will work with partners to continue to consider the potential merits, benefits and impacts of a Northern Gateway Access Package to improve accessibility and movements within north east Enfield and to support existing and new businesses in the Upper Lee Valley. This includes exploring the potential for NGAR as part of NGAP.

Current Transport Proposals and Initiatives - Crossrail 2

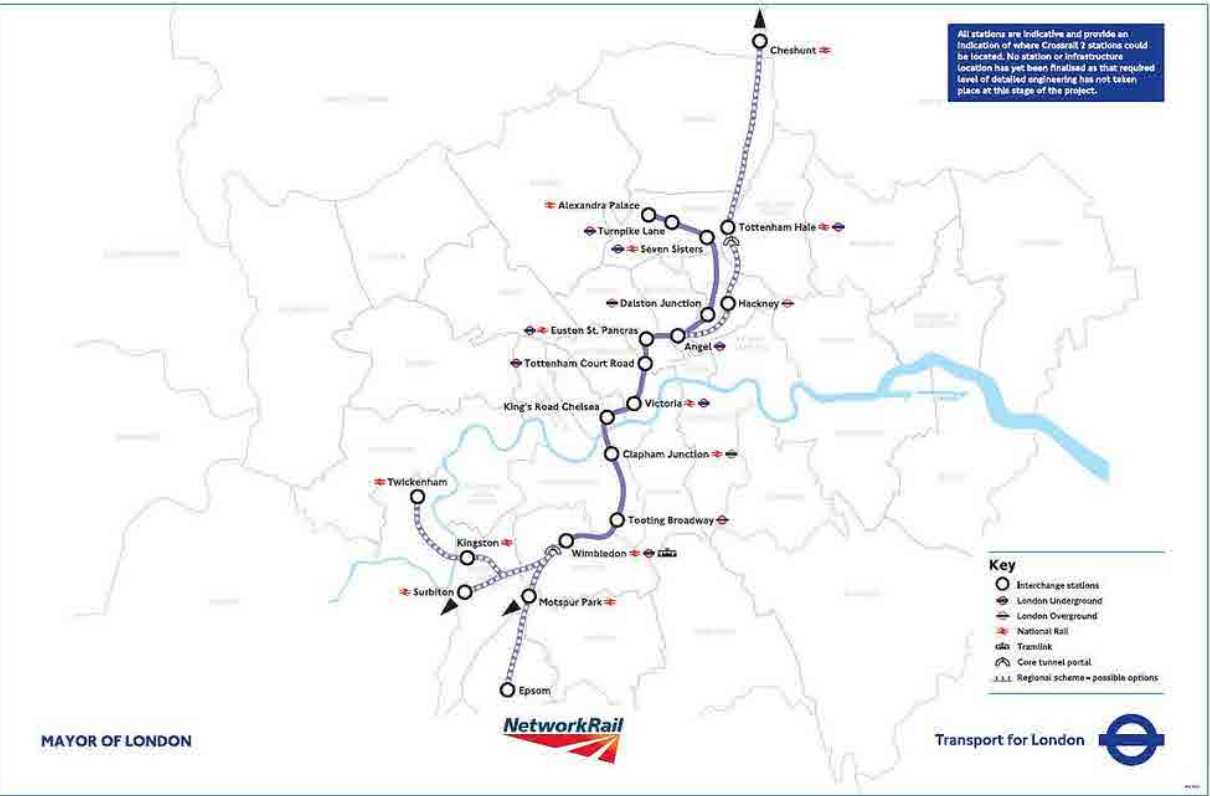
5.2.14 Crossrail 2 is a proposed new line across London currently being considered by TfL and Network Rail.

5.2.15 Two different options are currently under consideration for Crossrail 2; the metro option and the regional option. If the regional option is to be taken forward then a combined Overground/Underground railway will run from Surrey via Alexandra Palace to Hertfordshire, crossing through North East Enfield. The metro option would not directly serve the NEE area, running between Wimbledon and Alexandra Palace only.

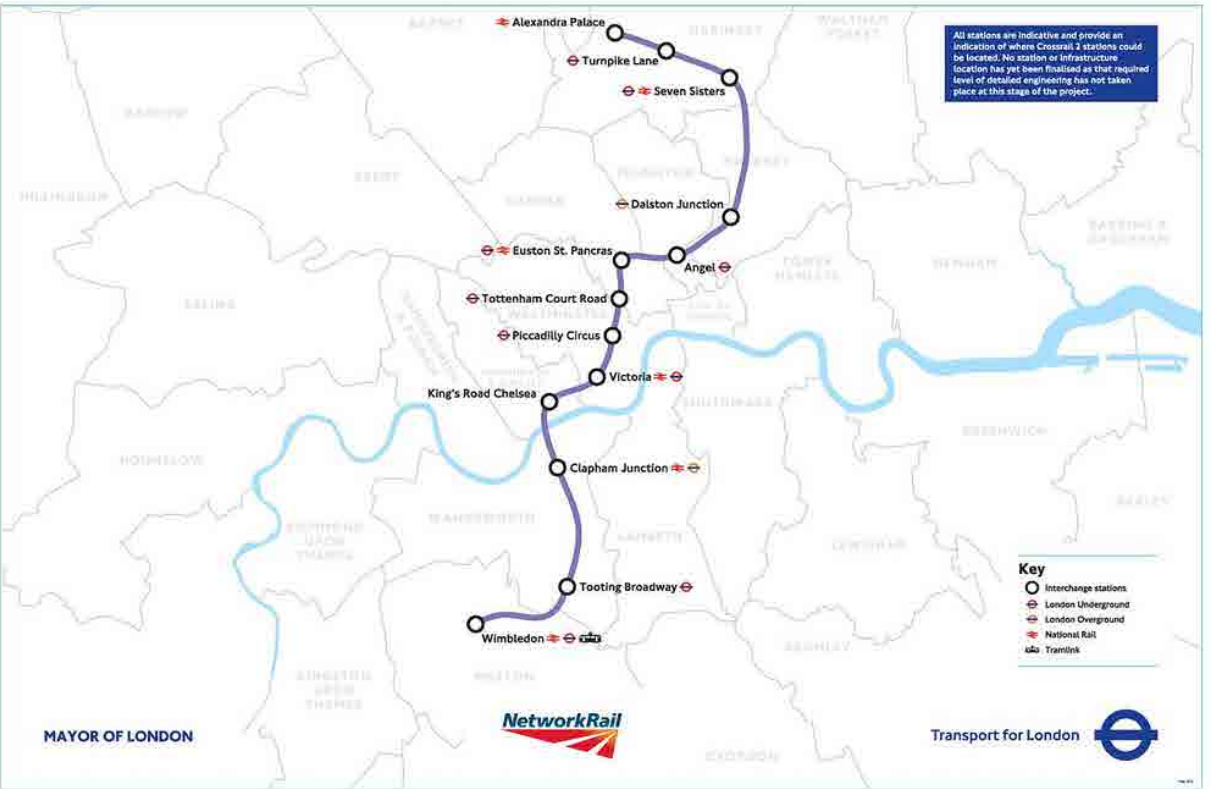
5.2.16 A report is due on the options for Crossrail 2 by the end of 2013, with plans to start safeguarding the preferred route in 2014 to be opened by the early 2030's.

5.2.17 LBE would like to see Ponders End and Brimsdown stations included in the safeguarding for the regional option.

5.2.18 The Upper Lee Valley Transport Study (2012) estimates that the level of growth expected in the opportunity area will generate over 20% increase in peak hour trips to, from and within the valley. Four tracking of the Lea Valley Mainline via Tottenham Hale is a pre-requisite of Crossrail 2 and is required in addition to the branch along the Upper Lea Valley to Cheshunt.



Crossrail 2: Regional option Source: Transport for London



Crossrail 2: Metro option Source: Transport for London

Current Transport Proposals and Initiatives - West Anglia Mainline Enhancement Project (Including level crossings)

5.2.19 The regional Crossrail 2 proposes a service frequency of 30 trains per hour therefore the railway line through Ponders End, Brimsdown and Enfield Lock would need to be expanded to accommodate three to four tracks.

5.2.20 However, even if Crossrail 2 does not come forward in its regional form, it is the aspiration of LBE and Network Rail to increase the service frequency on this line to four trains per hour stopping at all stations. This is to improve access to public transport and to increase its capacity. For this to happen 3/4-tracking will be required.

5.2.21 Expanding the railway line to accommodate three or four tracks is likely to require a full re-design of Ponders End, Brimsdown and Enfield Lock stations. These stations are currently quite compact and the options for expanding them with additional tracks and platform alteration will need to be considered.

5.2.22 The increased service frequency whether from Crossrail 2 or a Network Rail improvement scheme, is likely to result in the full closure of the Green Street and Ordnance Road level crossings. It would not be viable to keep these crossings operational when they must be closed every 15 minutes with the National Rail improvement scheme or every 2 minutes with the Crossrail 2 regional option.

Current Transport Proposals and Initiatives – Stratford-Tottenham Hale-Angel Road (STAR) Scheme

5.2.23 West Anglia Main Line is looking to provide a 4tph local stopping service between Stratford, the reopened Lea Bridge, Tottenham Hale, Northumberland Park and Angel Road; also known as the STAR scheme. The scheme is not within the NEEAAP boundary, but it is considered to be the first step in the longer term 4-tracking of the Lee Valley main line to Broxbourne, via Ponders End, Brimsdown and Enfield Lock.

5.2.24 STAR is expected to cost approximately £72 million and will be largely funded by Network Rail, who is allocating \$44m to the scheme in its Strategic Business Plan in January 2013. This includes 4tph between Stratford, Lea Bridge and a third track from south of Coppermill Junction to Tottenham Hale. Another £3m will be funded by TfL for upgrade works at Tottenham Hale station, which could contribute to the larger rebuild project that is under consideration. The outstanding £25m will be funded through various bids from the North London Strategic Alliance. The North London Strategic Alliance was established in 1999 as the sub-regional strategic partnership for North London, bringing together public, private and voluntary sector organisations from Barnet, Camden, Enfield, Hackney, Haringey and Islington. The key purpose of the NLSA is to provide the strategic leadership to develop and articulate a clear vision for north London.

5.2.25 The scheme will strengthen the link between the Upper Lee Valley and Stratford, as well as the Lower Lee Valley and the Isle of Dogs; and the role of Tottenham Hale as the

interchange. Although it is not within NEEAAP, increasing to 4tph can bring vast amount of economic benefits and has a strong benefit cost ratio to the borough, as stated in the study conducted by Oxford Economics³ on the economic impacts of the regeneration of Lee Valley Corridor.

5.2.26 The scheme is expected to be delivered within Network Rail's Control Period 5 (2014-2019). The first part of the third track scheme between Stratford and Angel Road has been identified for implementation by 2017.

Public Realm Improvements

5.2.27 As part of the Ponders End Central Planning Brief transport interventions were proposed. These included:

- Improved operation of Nags Head Road/ A1010 junction- particularly for pedestrians;
- De-cluttering of the High Street;
- Green link between Queensway Campus and High Street;
- Improve crossing facilities at South Street /A1010 junction;
- New and improved routes into and through Ponders End Park;
- Improvements to South Street for pedestrians;
- Connection from Queensway Campus site into Queensway;
- Cycle connection to Southbury Station;
- Improved connections to High Street;
- Potential new access into Tesco;
- Proposed pedestrian/cycle access to Derby Road; and
- Further public realm improvements.

5.2.28 As part of the Regeneration of Ponders End, work has been completed to improve Ponders End Park. This has included a new east-west route connecting the High Street to South Street, improved lighting and provision of community facilities such as an improved tennis court and a jogging/ walking path around the outside of the Park.

5.2.29 LBE is working with partners to open up land currently closed to public access in the Columbia Wharf Watermeadows in the Lee Valley Regional Park. Funding has been secured from two developments to start the project and LBE is now refining the plans and seeking other sources of funding.

5.2.30 To support the development of Oasis Hadley Academy improvements at South Street are required. In April 2012 LBE approved plans to carry out enhanced improvement works to South Street including an upgrade to Ponders End Station Square, a piazza to the front of the Academy and a

³ Oxford Economics was commissioned by the London Borough of Enfield to conduct a study named "Investment and Regeneration in the Lee Valley Corridor- Assessing the potential economic impacts for London and the UK", which was published in January 2012. The report looks at various schemes and options of development in the area and finds out it makes a strong case for investment to support regeneration due to the significant economic benefits it can bring to the borough's and to the wider London and UK economies.

greener, more pedestrian/cycle friendly public realm treatment between Scotland Green Road and the Ponders End Station.

5.2.31 The Upper Lee Valley Opportunity Area Planning Framework⁴ (ULVOAPF) details the pedestrian-focussed public realm improvement opportunities for Ponders End. The public realm improvements that is proposed include:

- New green route along the southern edge of Bishop Stopford's School to connect Enfield Playing Fields and Durrants Park and onwards to Lee Valley Regional Park;
- Improve signage and sense of arrival of existing routes through Brimsdown Industrial Estate and the Lee Valley Regional Park;
- Aspirations for a new crossing over railway to improve access from Alma Road Open Space to Brimsdown Industrial Estate and the Lee Valley Regional Park;
- Explore the possibility of a (vehicular) connection through Tesco car park to relieve the Nag's Head junction;
- Access to Southbury Station via Emilia Close;
- Route from the Electric Quarter development to Ponders End Park;
- Clear and direct routes from Academy Street development to Ponders End Park and Ponders End Waterfront. The redevelopment of the Alma Estate will reinstate the historic street pattern;
- Ponders End Waterfront development as an education natural refuge with improved access to Park, Lee Valley Road and South Street;
- Improve and enhance access to the Lee Valley Regional Park, River Lee and King George's Reservoir- partially open to the public; and
- Enhance footpath by the drainage ditch along the allotments and create new link on the eastern edge to South Street.

Current Transport Proposals and Initiatives - Mini-Holland

5.2.32 The Mini Holland Project was launched by the Mayor and TfL in April 2013, which was also one of the suburban cycling improvement projects in The Mayor's Vision for Cycling in London⁵. The project aims to pick three to four outer London boroughs for the £100 million funding to improve cycling and become as cycle-friendly as the Dutch cities. It was initiated mainly due to the recognition of the amount of short journeys made in outer London boroughs, which could be easily cycled than travelling by other vehicles.

5.2.33 Enfield is one of the eight shortlisted boroughs. Other competing boroughs are Bexley, Ealing, Kingston, Merton, Newham, Richmond and Waltham Forest. Final selection is expected to be informed in early 2014.

5.2.34 As part of the bid, Enfield is working to transform cycling within the borough and change the cycling culture. Residents and schools have shown strong support to cycling and the scheme, provided there are safe cycle routes away from the main traffic. The bid then seeks to provide a safe environment for people who want to cycle without fear. Another purpose of this project is to tackle obesity problem, where Enfield has some of the worst health inequalities in the UK; as well as addressing poor air quality by monitoring traffic.

5.2.35 In terms of infrastructure, Enfield Council aims to turn the borough into a "cycle haven". The bid submitted to the Mayor of London in December 2013 included a range of projects:

- redesigning the town centres of Enfield Town and Edmonton Green around cycling;
- improving links to the town centres from the wider area to create much improved environments not just for those who cycle but for everyone;
- creating two new segregated cycle routes, along the A1010 (Hertford Road) and the A105 (Green Lanes) to provide direct connections to Central London. The A1010 will dramatically change how children travel to the 23 schools along this route and how residents travel to the five high street shopping areas.

Existing Cycle Network

5.2.36 In the NEEAAP, there are two main existing cycle routes- National Cycle Route 1 and Local Cycle Route 53. NCR 1 runs north-south along the River Lee Navigation; while LCR 53 runs on Southbury Road, Nags Head and Lea Valley Road, forming an east-west link through the borough.

5.2.37 Some key routes have been identified by the council. A10 cycleway is an off-road north-south path running along the eastern footway of the Great Cambridge Road (A10), which is also the westernmost boundary of NEEAAP.

5.2.38 At Mollison Avenue/Meridian Way Cycleway, there is again an off-road north-south path running along the eastern footway of Mollison Avenue and Meridian Way. It serves the industrial areas in the East Enfield. There is a missing part at the top corner of the A1055 Mollison Avenue but continues at the roundabout.

5.2.39 Introductions of quietways along low traffic and low speed roads offer a safer environment for cyclists. This forms part of the council's Mini-Holland bid.

Greenways

5.2.40 Greenways are shared routes for cyclists, pedestrians and wheelchair users. They aim to improve access to and through green spaces and provide a nursery environment where young and novice cyclists can develop their riding skills.

5.2.41 They are primarily leisure routes and are not considered to high-speed cycling use. Some sections also provide traffic-free routes for those that wish to use the route for normal uses e.g. to cycle to work, school or to shop.

⁴ Upper Lee Valley Opportunity Area Planning Framework (July 2013) Mayor Of London

⁵ The Mayor's Vision for Cycling in London – An Olympic Legacy for all Londoners was published in March 2013. It presents some key outcomes as well as listing six routes, junctions and suburban cycling improvements in the document.

5.2.42 Greenways in Enfield will contribute to the wider London Greenways network of attractive and functional routes. There are plans to connect greenways with the NCR 12 from Hadley Wood to Enfield Island, potentially increasing the usage of the routes within the NEEAAP areas.

Cycle Hire Update

5.2.43 There is currently no plan to expand the Barclays Cycle Hire towards NEE or LBE. The latest expansion of is towards the South West of London, which includes parts of Wandsworth, Hammersmith and Fulham, Lambeth, as well as Kensington and Chelsea.

5.2.44 Enfield will support further phases of Cycle Hire subject to demand and feasibility, as well as providing full measures of information and publicity to promote to residents.

5.2.45 Although there is no Barclays Cycle Hire docking stations in the LBE, the borough is providing Enfield's first cycle hire scheme at Enfield Town station, with the support from Greater Anglia as part of the 2013/14 cycling schemes. 20 additional cycle stands have recently been provided on the platform, while Greater Anglia have adopted a cycle hire operation named "Bike & Go" at the station.

Cycling Strategies

5.2.46 LBE has three main objectives regarding cycling:

- to improve access to recreation and leisure;
- to encourage cycling; and
- to reduce pollution

5.2.47 To address these, Enfield has developed a three-year cycling strategy in the Enfield Cycling Action Plan Study, with reference to the Mayor's London Biking Borough programme to increase levels of cycling across the borough.

5.2.48 The aim to the Action Plan Study is to provide cyclists in Enfield with a safer and more convenient cycling environment. The key objective is to encourage new or occasional cyclists to start cycling and to cycle more.

5.2.49 The proposed programme will be funded through the Local Implementation Plan (LIP) and an allocated funding of £600,000 to cycling from 2012 to 2015.

5.2.50 Enfield currently has a below average level of cycling and the council is aspired to explore further into the cycling potential in the borough.

5.2.51 Although Enfield is not part of the Biking Borough programme, the council has created a similar programme with local funding. The Enfield Cycle Action Plan has then identified Enfield Town as the cycle hub⁶. Target residents include those living within 8km of cycling distance of Enfield Town, which include the NEEAAP area.

5.2.52 Cycle hub serves to make Enfield Town a hospitable area for cyclists, with sufficient cycle parking and safety measures. Top 10 cycling initiatives were proposed, including infrastructure, cycle training and school promotions, information (e.g. maps and signage) and raising awareness.

5.2.53 The Study has recorded five busiest locations for cycling over a ten year period from 2000 to 2010. Three are found in the south of the borough, close to the boundary of LBE and London Borough of Haringey. Two are on Southbury Road (A110), one of which falls within the NEE area: the stretch of Southbury between Great Cambridge Road (A10) and Hertford Road (A1010).

5.2.54 Census data in 2001 shows that the percentage of people who cycle to work was 1.69% in Enfield. 2011 Census shows the percentage has dropped to 1.49%; while within the NEEAAP it is approximately 1.57%.

5.2.55 TfL has undertaken a research on car trip lengths in Enfield and found out that 80% of the car trips are within reasonable cycling distance of 8km which takes around 40 minutes to complete. 47% of the journeys were for purposes like shopping, leisure and entertainment and most are less than 8km.

Cycling Initiatives

5.2.56 Enfield Council is implementing the following initiatives to promote and encourage the use of cycling in the borough, with an emphasis on schools:

- 20mph zones being implemented (mainly around schools);
- cycling promotions in schools linked to school travel plans;
- cycling-specific road safety schemes; and
- free cycle training to school children and adults

5.2.57 Another list that represents the full spectrum of potential initiatives that could be introduced was compiled from various bodies. It is a list of 31 initiatives and is grouped into four categories of infrastructure; cycle safety; marketing and enabling cycling; and destination-based: schools, workplaces and town centres.

5.2.58 The council's role is to choose the most effective measure as target implementation to form the basis of the Enfield cycling strategy until 2015.

Barclays Cycle Superhighways

5.2.59 There are currently four existing Cycle Superhighways (CS) in London. Eight more routes are planned to be delivered by 2015 radiating from Central London.

5.2.60 The closest CS to LBE is CS1 which is proposed to link Tottenham to City. The expected launch date of CS1 will be in 2015. It could improve north-south linkages and encourage people to cycle into and from Central London.

⁶ Further selection process between the three shortlisted cycle hubs can be found in Enfield Cycling Action Plan Study conducted by SKM Colin Buchanan in July 2012.

5.2.61 There is currently no plan to extend the route to reach the LBE from TfL. However, it is considered in the Enfield's LIP that having the Barclays CS is one of the measures to enhance connectivity and attractiveness of the orbital public transport. In addition, A1010 is a north-south cycle route that links the central part of the borough to the CS1. Further plans to realign the southern end of the A1010 to connect to Haringey's cycle route have been agreed with London Borough of Haringey. This will then route to the proposed CS1.

5.2.62 Enfield has implemented plans to support the CS1 through works like training provision (i.e. Bikeability training); promotion and information on CS scheme; giving priority to cycle facility enhancements e.g. greenways.

5.2.63 The latest addition to the CS2, which runs from Ilford to Stratford, is now extended to Bow roundabout. It is the first fully segregated section of the CS network, being almost entirely segregated from the adjacent A11. It is currently being criticised on the safety issues on the route and the Mayor has called for urgent design improvements.

5.2.64 The Mayor also has plans for a "substantially-segregated cycle superhighway" through centre of London. It will act as a north-south segregated route, adding to the existing east-west route.

Cycle Parking

5.2.65 As part of the CS1 promotion, the council will provide 30 cycle parking spaces per year, including 15 on-street and 15 off-street spaces. It is also intended to add cycle parking in all station, major trip attractors as well as the town centres. There is no dedicated programme to the installation of cycle parking across the borough, but they are provided as part of other schemes or as requested by cyclists.

5.2.66 Different types of cycle stands can also be found across the borough. To reduce street clutter, it is expected to see more cycle hoops on the streets.

5.2.67 More cycle parking locations are yet to be identified by residents and the council.

Car Parking/ CPZs: Controlled Parking Zones

5.2.68 There is a Controlled Parking Zone (CPZ) in the area outside Enfield College. In effect, this extends along part of the A1010 and along The Ride and restricts the availability of parking. The operational times of the zone are 9.00am to 6.30pm Mondays to Fridays. Parking is only permitted within the defined markings of a bay and with the display of a valid Residents/Business Permit or Visitor Parking Card.

5.2.69 There are no other CPZs within the AAP boundary. The next closest CPZ are in Enfield Town and Bush Hill Park; however, both of these zones start well to the west of the A10 and so are considered outside the sphere of influence of issues within the AAP area.

Pay and Display

5.2.70 Pay and display parking currently operates in the shopping area of Enfield Highway along the A1010, Green Street and Brick Lane. It applies to the period between the times of 9am and 5.30pm, with the exception of some spaces outside designated properties.

Car Park Provision

5.2.71 Off Street parking is provided in the Council's Pay & Display car parks throughout the borough. The charging period is 7.30am-06.30pm Mondays to Saturdays. However, there are few public car parks of much note within the AAP boundary. Most are associated with large retail stores such as Tesco. Only very limited parking is available at any of the local rail stations.

Opportunities for Improvements

5.2.72 In summary, the key opportunities for improvement are:

- improving east-west links for all modes, enhance permeability and connectivity to all social infrastructure;
- improving cycle infrastructure to encourage modal shift;
- seven key improvements have been highlighted in the Cycling Action Plan Study, they include:
 - improvements to /completion of the east-west LCN route along Southbury Road;
 - direct and signed cycle routes through Enfield Town
 - completion of NCR 12;
 - introduction of a direct north-south route along Green Lanes from Palmers Green to Enfield Town; and
 - signing of the direct north-south route along A1010 Hertford Road. New developments with optimal car parking provision
- integrated and framework travel plans for new developments to ensure encouragement of sustainable modal choices;
- intensification along the railway line and along A1010; and
- projects identified in the Mini-Holland bid.

5.2.73 The following pages set out detailed analysis of key east-west pedestrian and cycle connection, identifying opportunities for improvement. These are not intended to be firm projects, and further detailed study and designs will be required.

Route A: Turkey Street - Ordnance Road - Enfield Lock Station - Lee Valley Park

Proposed route (Additional to LBE Cycle Routes Strategy)



Turkey Street

Turkey Street and Ordnance Road provide a very direct east-west link across North East Enfield, with only one short change of direction needed on Hertford Road.

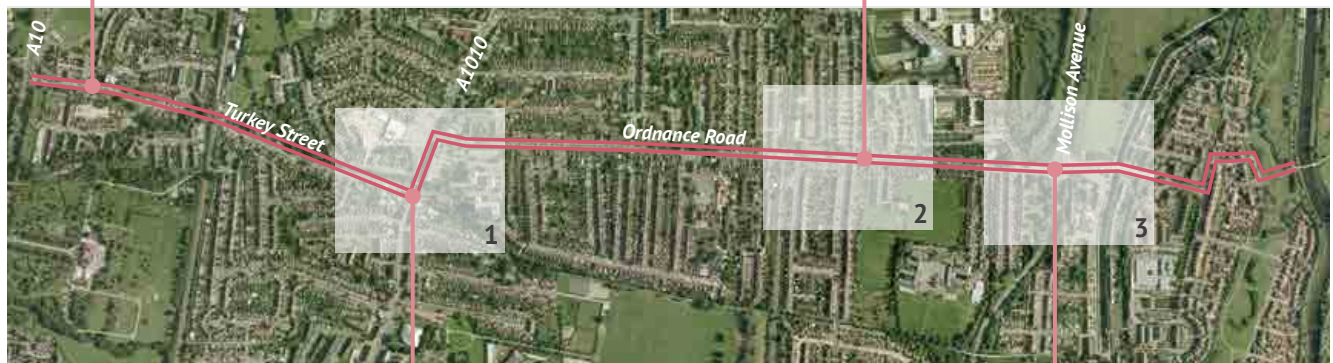
Large amounts of on-street parking make the provision of dedicated cycle lanes difficult. However, the directness of the route is attractive to users. Clear, consistent signage would help people find their way around. This could be supported by public art that extends the themes of the pocket park at Turkey Street Station.



Underpass at Enfield Lock Station

The level crossing at Enfield Lock is closed some 40 minutes out of every hour. Pedestrians and cyclists must either wait or use the underpass.

This underpass is very narrow and cannot safely be used by pedestrians and cyclists at the same time. Although it is short in length, it is not possible to see clearly through it as the approach ramps are at an angle. Users may perceive it as unsafe as a result.



The junction of Turkey Street and Hertford Road is identified as a key 'gateway' to Enfield Wash Local Centre, and public realm improvements are recommended. There is an opportunity to improve wayfinding through signage and other means to guide pedestrians and cyclists between Turkey Street and Ordnance Road via Hertford Road.



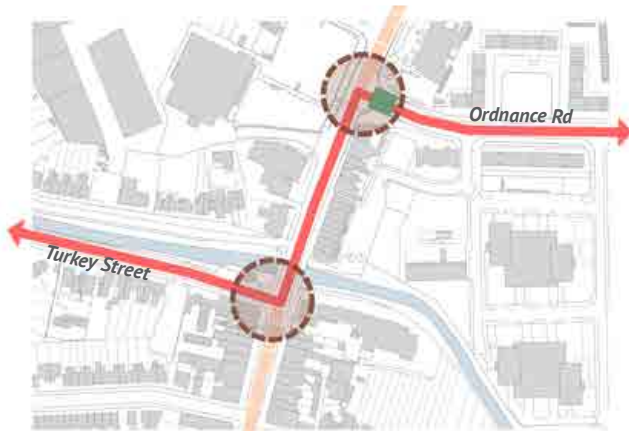
Junction of Turkey Street and Hertford Road

The junction between Ordnance Road and Mollison Avenue is an obstacle to this route, as the junction is currently unfriendly and intimidating for pedestrians and cyclists. Whilst it will remain a heavily trafficked junction, dedicated cycle lanes and Advance Stop Lines (ASLs) would help improve the connection to the existing Mollison Avenue / Smeaton Road cycle routes



Ordnance Road and Mollison Avenue junction

Route A: Turkey Street - Ordnance Road - Enfield Lock - Lee Valley Park



1: Junction between Turkey Street and Ordnance Road

The current traffic high flows on Ordnance Road means that it is not suitable for designating as a cycle route. However, should the level crossing close as a result of the West Anglia Mainline Enhancement Project, traffic flows will change considerably. There may be an opportunity to introduce a cycle route at this point in time.










2: Underpass at Enfield Lock Station



3: Large junction between Ordnance Road and Lee Valley Park

Key

-  Location of required Wayfinding and road marking improvements (at changes of direction and junctions)
-  Zone marks area where substantial improvement works are required
-  Area where improvement works are required to connect existing and proposed cycle route
-  Existing cycle route
-  Proposed cycle route; environmental improvements required including lighting and security
-  Improvements to A1010 as part of Mini-Holland bid
-  Possible location for Advanced Stop Line (ASL) with 15m no parking zone before junctions enforced

Route B: Greenville Cottages - Longfield Ave- Albany Park - Turkey Brook - Lee Valley Park As existing in LBE Cycle Routes Strategy - Proposed Quietway



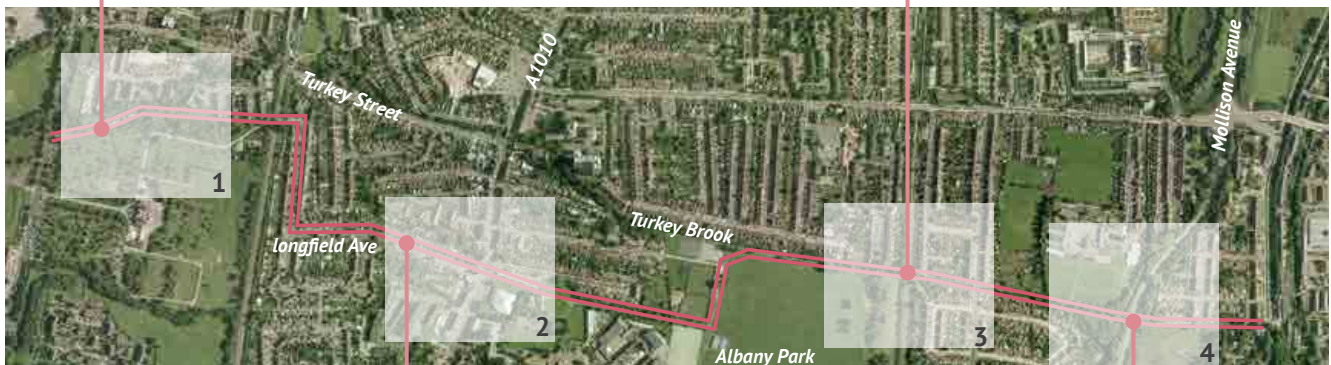
Route alongside cemetery between A10 and Longfield Avenue

The route running alongside the Enfield Cemetery has the benefit of being wide enough for both cyclists and pedestrians. Improvements can be made through increasing the visual permeability of the fencing and cutting back foliage. This would provide greater visibility along the route and give users a greater sense of security.



Cycle route over bridge at Albany Park

The link through Albany Park is part of the London Outer Orbital Path (LOOP). The bridge over the railway line is unattractive and not easily used by cyclists. A masterplan for improving Albany Park is underway. There is an opportunity to improve this bridge crossing as part of this masterplan - e.g. using the landform of earth mounds to gain some of the height needed to cross the railway line on the western side. Opportunities for a ramped access on the east should be explored.



The existing cycle route along Longfield Avenue has a distinct lack of wayfinding and road markings. For non-locals the route is unclear. Consistent waymarking would improve the clarity of the route. The route has high levels of on-street parking, making the introduction of on-street cycle lanes difficult.



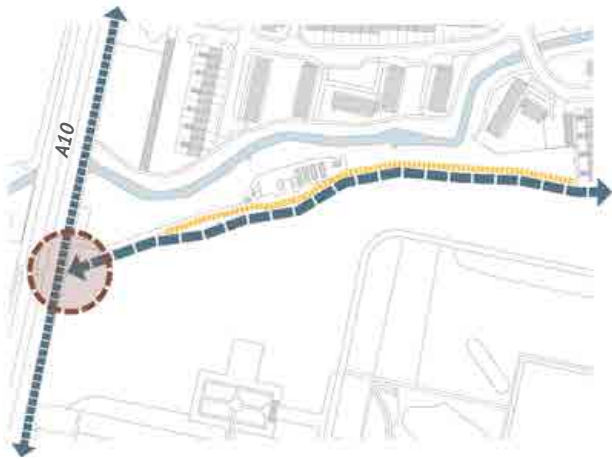
Cycle route along Longfield Avenue lacks wayfinding markers

The pedestrian and cycle bridge crossing over Mollison Ave is quite successful as it is a gentle gradient and very direct. It connects well into the Enfield Lock Conservation Area and into the national cycle route running north-south next to the River Lee Navigation.

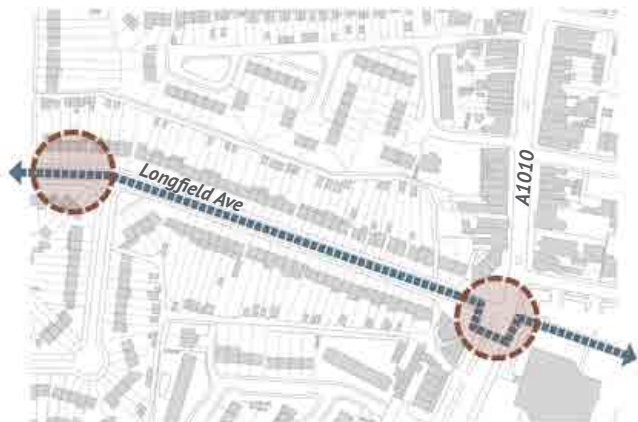


Eastern side of the existing pedestrian bridge over Mollison Ave

Route B: Greenville Cottages - Longfield Ave- Albany Park - Turkey Brook - Lee Valley Park



1: Route alongside Cemetery between A10 and Longfield Ave








2: Cycle route along Longfield Ave towards Albany Park



3: Stepped bridge at rail crossing along Turkey Brook / Albany Park

Key

-  Location of required Wayfinding and road marking improvements (at changes of direction and junctions)
-  Zone marks area where substantial improvement works are required
-  Existing cycle route
-  Existing cycle route; environmental improvements required including lighting and security
-  Improved maintenance of greenery/ boundary treatment

Route C: Brick Lane - Durants Park - Green Street - Lee Valley Park As proposed in the Council's Cycle Routes in Enfield - Proposed Greenway



Proposed East-West cycle route along Brick Lane.

The Council has designated this route as a proposed Greenway. Currently the route lacks meaningful and consistent signage which would help people find their way. With more regular signage from Brick Lane to Stockingswater Lane, the route would link into existing north-south cycle routes along the A10, the River Lee Navigation and Hertford Road. The access to the A10 is convenient, but very narrow and squeezes between blank side elevations - it is not pleasant to use.



Brimsdown Station underpass

The level crossing at Brimsdown Station is closed almost 40 minutes out of every hour. Pedestrians and cyclists must either wait or use the underpass, which is a long route that appears to be for station users only. People often wait for the level crossing to re-open in preference to using the underpass.



The route through Durants Park is an attractive and direct part of this route. However, it is not a good route at night or on dark winter's evenings: it has no lighting. Whilst low-key lighting may be possible, an alternative 'night time' link along Green Street would be helpful.



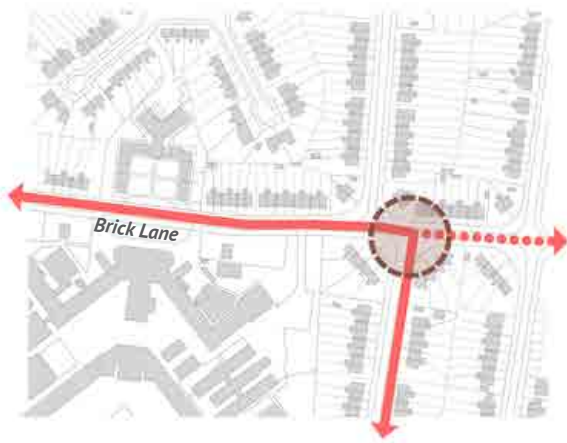
Durants Park currently lacks lighting

The entrance to the Lee Valley Park through the Brimsdown Industrial Estate is not very clear. Improvements are needed to highlight the entrance better for pedestrians and cyclists. Maintenance of existing greenery would help make the entrance more visible. Better designed signage would also be beneficial to help orientate leisure users.

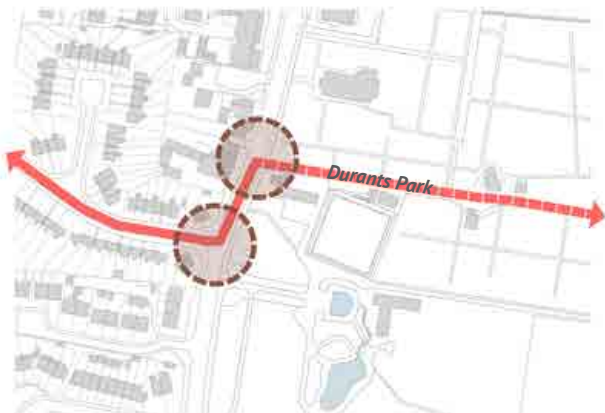


Narrow gated access to Lee Valley Park from Stockingswater Lane

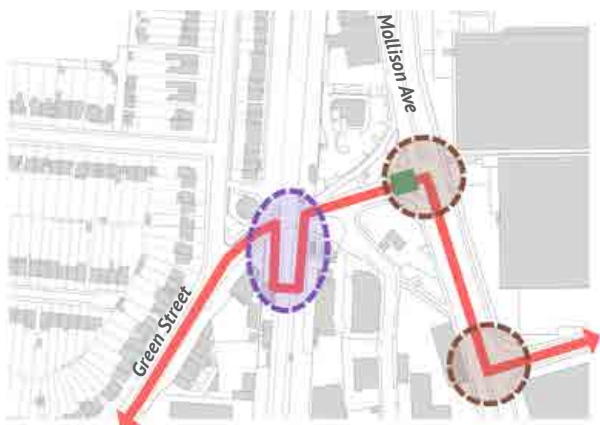
Route C: Brick Lane - Durants Park - Green Street - Lee Valley Park



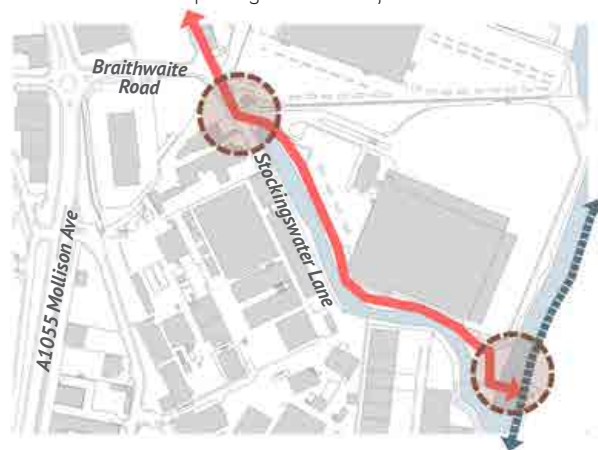
1: Cycle route along Brick Lane



Fi2: East-West link through the cemetery next to Durants Park



3: Brimsdown Station rail crossing



4: Access to Lee Valley Park from Stockingswater Lane

Key

- Location of required Wayfinding and road marking improvements (at changes of direction and junctions)
- Zone marks area where substantial improvement works are required
- Existing cycle route
- Proposed cycle route; general road surface improvements where required
- Proposed cycle route; environmental improvements required including lighting and security
- Option night route
- Possible location for Advanced Stop Line (ASL) with 15m no parking zone before junctions enforced

Route D: Southbury Road - Nags Head Road - Lee Valley Road

As proposed in the Council's Cycle Routes Strategy



Southbury Rd crossing Great Cambridge Road (A10)

Southbury Road and Nags Head Road provide a very direct East-West link across North East Enfield, with only three junctions dividing the route. The section of the route along Southbury Road currently lacks meaningful and consistent wayfinding for cyclists. The introduction of Advanced Stop Lines for cyclists would improve the major crossing as highlighted in Fig 7.13.



Nags Head Road cycle lanes

The Nags Head Road section of the route has existing cycle lanes marked at both sides of the road. These appear to work successfully and - although controlled by only a single yellow line - has not been overrun with on-street parking.

The clear and consistent road marking along Nags Head Road provides cyclists with a dedicated route and a reasonable feeling of security.



Although there are only three junctions on this route, they are all major in nature and improving them could transform the experience for pedestrians and cyclists. Southbury Road / Nags Head Road pushes cyclists off their direct line and onto a marked route on the pavement to cross the road. Providing advanced stop lines for cyclists would provide an option for those that prefer to stay on the road.



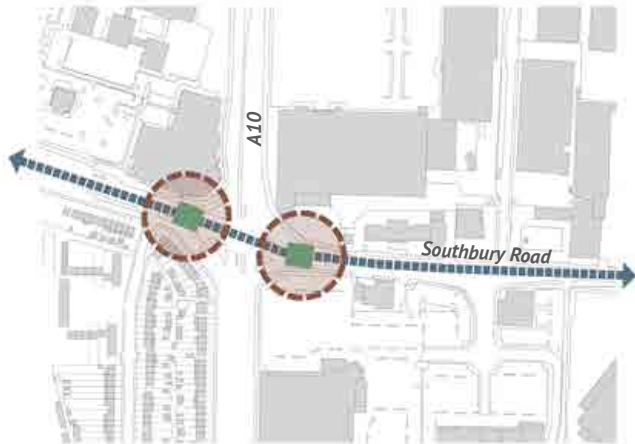
Southbury Rd crossing to Nags Head Road

The cycle lanes continue from Nags Head Road directly onto the extensive roundabout at Lee Valley Road. This section of the route could be improved with better wayfinding and clearer markings.

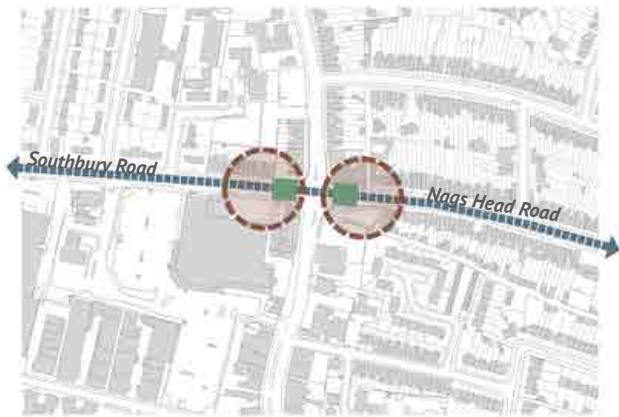


Lee Valley Road roundabout

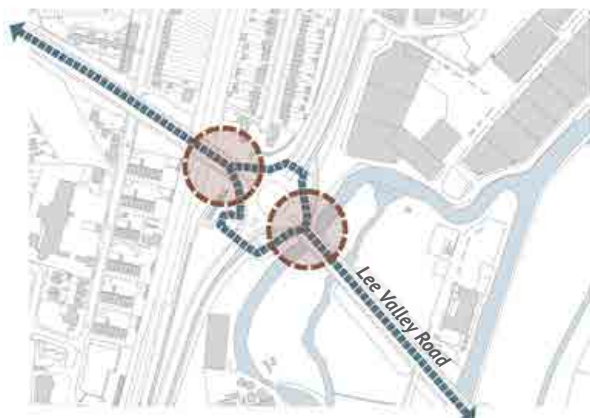
Route D: Southbury Road - Nags Head Road - Lee Valley Road



1: Southbury Rd crossing Great Cambridge Road (A10)






2: Southbury Rd to Nags Head Rd junction



3: Lee Valley Road Roundabout

Key

-  Location of required Wayfinding and road marking improvements (at changes of direction and junctions)
-  Existing cycle route
-  Possible location for Advanced Stop Line (ASL) with 15m no parking zone before junctions enforced

Route E: Lincoln Road - South Street - Wharf Road - Lee Valley Park As proposed in LBE Cycle Routes in Enfield - Proposed Quietway



Lincoln Rd crossing Great Cambridge Rd (A10)

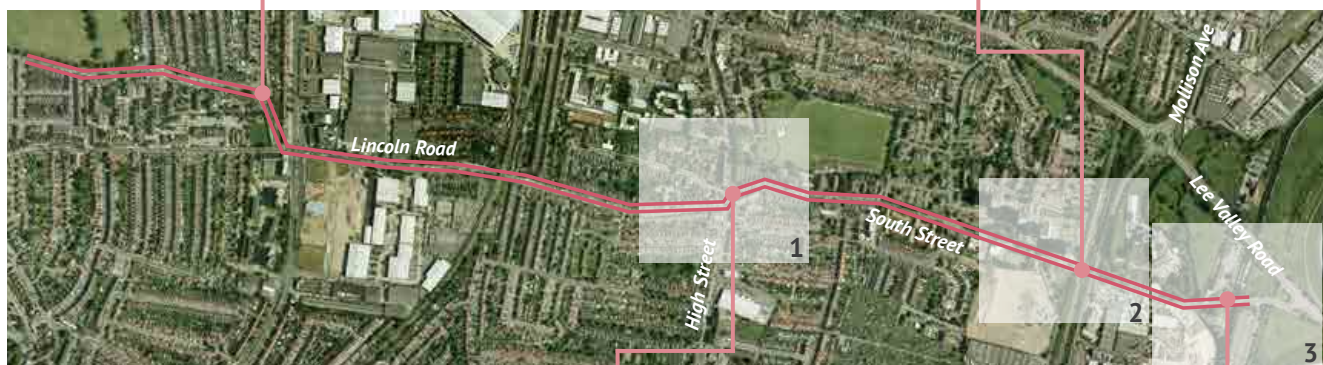
Lincoln Road has four lanes of traffic at the junction with the A10 and very limited space to accommodate cyclists on street. Moving eastwards, the street becomes two lanes in width and has extensive on street parking. There is currently no dedicated cycle provision in this area.



Ponders End Station forecourt, South Street

Some public realm improvements to South Street have already been undertaken, and it is noticeable how much more pleasant this route is for pedestrians and cyclists than others in the NEE area.

The eastern end of the street will undergo improvements as part of the Alma Estate regeneration, and this needs to be brought up to the same standard as the rest of the street.



Ponders End High Street, Lincoln Road and South Street form a key junction. There are currently no dedicated pedestrian or cycle crossing points of the High Street at this point. This is a key focal point for improvement.



Lincoln Rd looking towards South Street

The pedestrian and cycle bridge at Ponders End Station is unattractive. Nevertheless its long ramps provide a functional way of crossing both the railway line and Mollison Avenue. The connection with Wharf Road is awkward, and there is conflict with lorries accessing the flour mill.

Better signage is needed linking to the key north-south leisure routes.

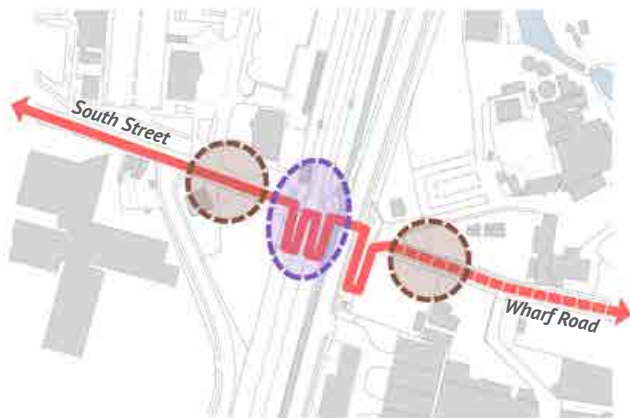


River Lee Navigation cycle path

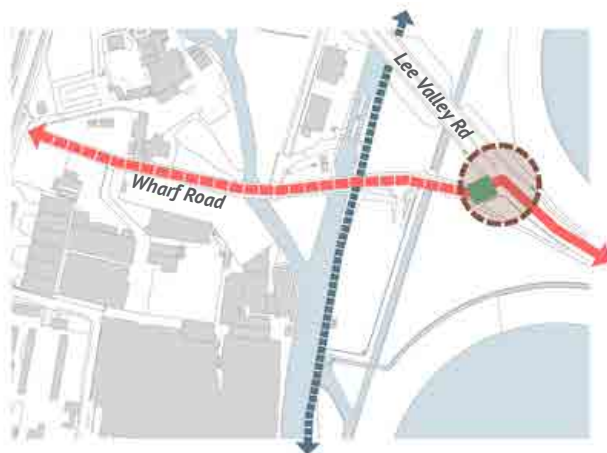
Route E: Lincoln Road - South Street - Wharf Road - Lee Valley Park



1: High Street to South Street junction



2: Cycle route over pedestrian and cycle bridge at Ponders End Station



3: Pedestrian and cycle route along River Lee Navigation

Key

- Zone marks location of required Wayfinding and road markings (at changes of direction and junctions)
- Zone marks area where major improvement works are required
- Zone marks area where improvement works are required to connect existing and proposed cycle route
- Existing cycle route
- Existing cycle route; environmental improvements required including lighting and security
- Proposed cycle route; general road surface improvements where required
- Proposed cycle route; environmental improvements required including lighting and security
- Improvements to A1010 as part of Mini-Holland bid
- Possible location for Advanced Stop Line (ASL) with 15m no parking zone before junctions enforced

Route F: A1010 Hertford Road

The A1010 is identified in the Council's bid for 'Mini Holland' funding as a key commuter cycle route to Central London, Haringey and Hackney. It also offers direct cycling access to a significant part of the borough and to major employment and regeneration areas in the Lee Valley. The A1010 is suffering

from an identity crisis caused by its mix of High Street environments and traffic corridors, and the Council wants to create a best-practice north-south route that becomes a place not just for cycling, but for people.



Roundabout at Carterhatch Road

The Southbury Road / Hertford Road junction is complex and busy. There is a need to re-design it to provide safe crossing facilities for cyclists of all levels and for pedestrians.

Hertford Road, Carterhatch Lane and Caterhatch Road form a key junction. At this roundabout there are currently no dedicated pedestrian or cycle crossing points. It can be difficult for cyclists to enter the roundabout due to the dominance of vehicles.



Dedicated cycle lane in Ponders End



Ponders End High Street

As with the other two shopping areas on the Hertford Road (Enfield Highway and Enfield Wash), the shops on Ponders End are hidden behind rows of parked cars and by high volumes of traffic simply passing through.



Junction between A1010 and Mollison Avenue

Bullsmoor Lane junction currently has high volumes of HGV traffic passing through it and with the existing narrow lanes it is a very intimidating and potentially dangerous environment for cyclists.

There is currently no provision for cyclists at the junction, including no Advance Stop Lines on all approaches. There are staggered pedestrian crossings at the junction. However, the minimum number of crossings is three to cross a single arm.

The Hertford Road is dominated by traffic and traffic-related infrastructure including guardrails, signage, road markings and controlled parking, much of which is located on slip roads and laybys dotted along the route. Despite the number of signs, wayfinding for pedestrians and cyclists is difficult.



Lay-by adjacent to Albany Leisure Centre on Hertford Road

