

3.0 Delivery Plan

3.1 Introduction

This chapter sets out Haringey Council's Delivery Plan for addressing the challenges and achieving the objectives identified in Chapter 2. This section is structured as follows:

- Section 3.2 identifies all potential funding sources for delivering the transport initiatives contained within this LIP for the period 2011/12 to 2013/14 and beyond.
- Section 3.3 details the types of interventions required to deliver the LIP objectives identified in Chapter 2. This section sets out the LIP's programme of investment for the period 2011/12 to 2013/14 and providing details of the scheme and programmes for the period 2011-2014 and beyond.
- Section 3.4 details the identification and prioritisation process for the Corridors, Neighbourhoods and Supporting measures programme and the
- Section 3.5 provides details of the Wood Green High Road Major Scheme in the Programme of investment.
- Section 3.6 provides details of the delivery plan for the MTS high profile outputs.
- Section 3.7 details the Council's involvement in delivering public transport service improvements in Haringey.
- Section 3.8 outlines Haringey Council's approach to managing risk.

3.2 LIP Funding Sources

Table 3.1 identifies the key potential funding resources required to delivery the LIP's programme of Investment for the three year period 2011/12 to 2013/14. (The types of scheme contained within the programme of investment are described in Section 3:3).

Table 3.1: Potential funding for LIP delivery (£,000s)

Funding source	2011/12	2012/13	2013/14	Total
Integrated Transport				
LIP funding: Corridors, Neighbourhoods & Supporting Measures	2,097	2,167	2,020	6,284
LIP: Local Transport	100	100	100	300
TfL Non LIP (Biking borough + car club)	81.5	235	54	370.5
Council Capital / Revenue (Parking Plan Road Safety Programme, Street lighting upgrade)	1530	1630**	1630**	4790
Third party sources: Planning/Developer Contributions (Section 278/106's)	1311	1048	272	2631
Total	5119.5	5180	4076	14,375.5
Maintenance				
LIP: Principal Roads	380	493	472*	1345
LIP: Bridges	166	1,989*	1304*	3,459
Council Capital / Revenue: Highways Maintenance (Local roads + footways)	1,300	1,300**	1,300**	3,900

maintenance)				
Total	1846	3782	3076	8704
Major Schemes				
Wood Green Town Centre	100	1,800*	1,956*	3,856
Overall Total	7,065.5	10,762	9,108	26,935.5

* Estimated funding required from TfL

** Indicative Council funding

3.2.1 TfL funding resources

As display in Table 3.1, the Council's key source of funding for delivery of the LIP's programme of investment is provided by TfL, through the following 4 categories.

1) Integrated Transport (Corridors & Neighbourhoods, and Smarter Travel): TfL allocate this funding through a needs based formula to support the Council in delivering transport improvement schemes in the borough. Current indications are that approximately £6.3 million will be available for the first three years of the Delivery Plan, from 2011/12 to 2013/14.

2) Maintenance: TfL provide funding to support the Council's maintenance programme for the borough's principal road network and bridges. TfL funding for road maintenance and bridges is confirmed annually.

3) Major Schemes: The main funding source for Major Schemes is provided through TfL's 3 three stage process for Major Scheme funding. Further details are provided in Section 3.5

4). TfL 'Non LIP' funding: TfL allocate funding from outside the LIP allocation for delivery of specific initiatives. Haringey have successfully applied for non LIP funding for the delivery of Haringey's biking borough strategy and for car club expansion. Further details are provided in Section 3.3.

3.2.2 Council funding

Over the three year period 2011/12 to 2013/14 the Council's capital and revenue funding resources will invest approximately £8.7 million into maintaining the borough's highway assets including non principal roads, footways, drainage, street lighting improvements, parking schemes, road safety measures and reactive safety measures targeted at reducing the numbers of road accident casualties.

3.2.3 Third Party funding

The LIP programme of investment has identified a potential source of funding of £2.5 million from section 278 and 106 agreements, as a condition of planning consent for major developments over the period 2011/12 to 2013/14. Further details are provided in table 3.6.

3.3 Types of Interventions

The following interventions are related to the identified LIP objectives described in Chapter 2. The link between the interventions and the objectives these will deliver is highlighted in the Programme of Investment, table 3.6 (page 68-71).

The interventions will be delivered over the 20 year period 2011-2031. Table 3.6 provides delivery programme detail for the 3 year period 2011-2014.

3.3.1 Environmental streets/20mph zones

These measures would support LIP objectives 2,3,4,6,7 and 9 detailed in the Programme of Investment. Our programme seeks to extend the DIY or environmental streets approach/20mph zones to cover as much of the Borough as is feasible over the period of the MTS.

Langham Road, Turnpike Lane area

The Council is working in partnership with Sustrans, the Sustainable transport charity, to develop the unique DIY Streets approach to a group of streets in the Langham Road area, N22, see Figure 3.1. This will be a two year project to develop innovative traffic calming, home zone type measures. It incorporates working with the local community to identify, design and develop the physical measures as well as encouraging residents to adopt sustainable travel behaviour.

The project commenced in 2010, with design and community involvement led by Sustrans. Final design and implementation will be completed by the Council during 2011/12 at an approximate total cost of £400,000.

DIY Streets is a project to combine the best of “home zones” (robust community involvement and innovative traffic calming features) with cost effective design measures and promotion of sustainable transport. There are a number of options for including different elements in the project, including promotion to car clubs and electric vehicle charging infrastructure.

The Council would like to develop further environmental streets proposals in partnership with local communities in Tottenham Hale (Broad Lane area), Warwick Gardens (Harringay Gardens area) during 2012/13 to 2013/14. Funding for further schemes will be sought for Noel Park and Seven Sisters residential neighbourhoods from 2014/15 onwards. The Council will apply expertise gained from working with Sustrans for the development and implementation of the Langham Road scheme.

Evidence shows that 20mph zones are effective in reducing road collision casualties. A recent Transport for London study found that 20mph zones in London reduced killed and seriously injured casualties by 57% and the frequency of injury collisions by 42%.

Figure 3.1 Langham Road DIY Streets boundary

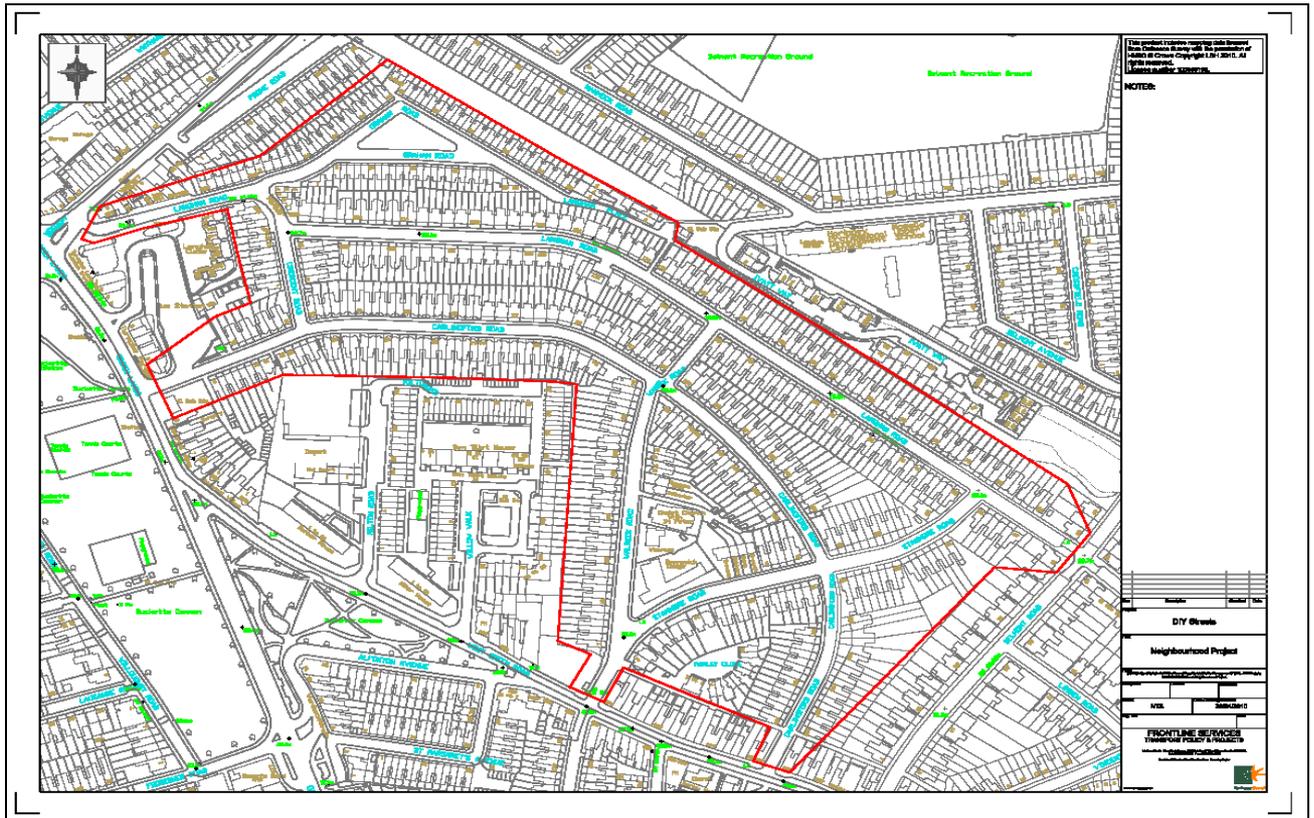
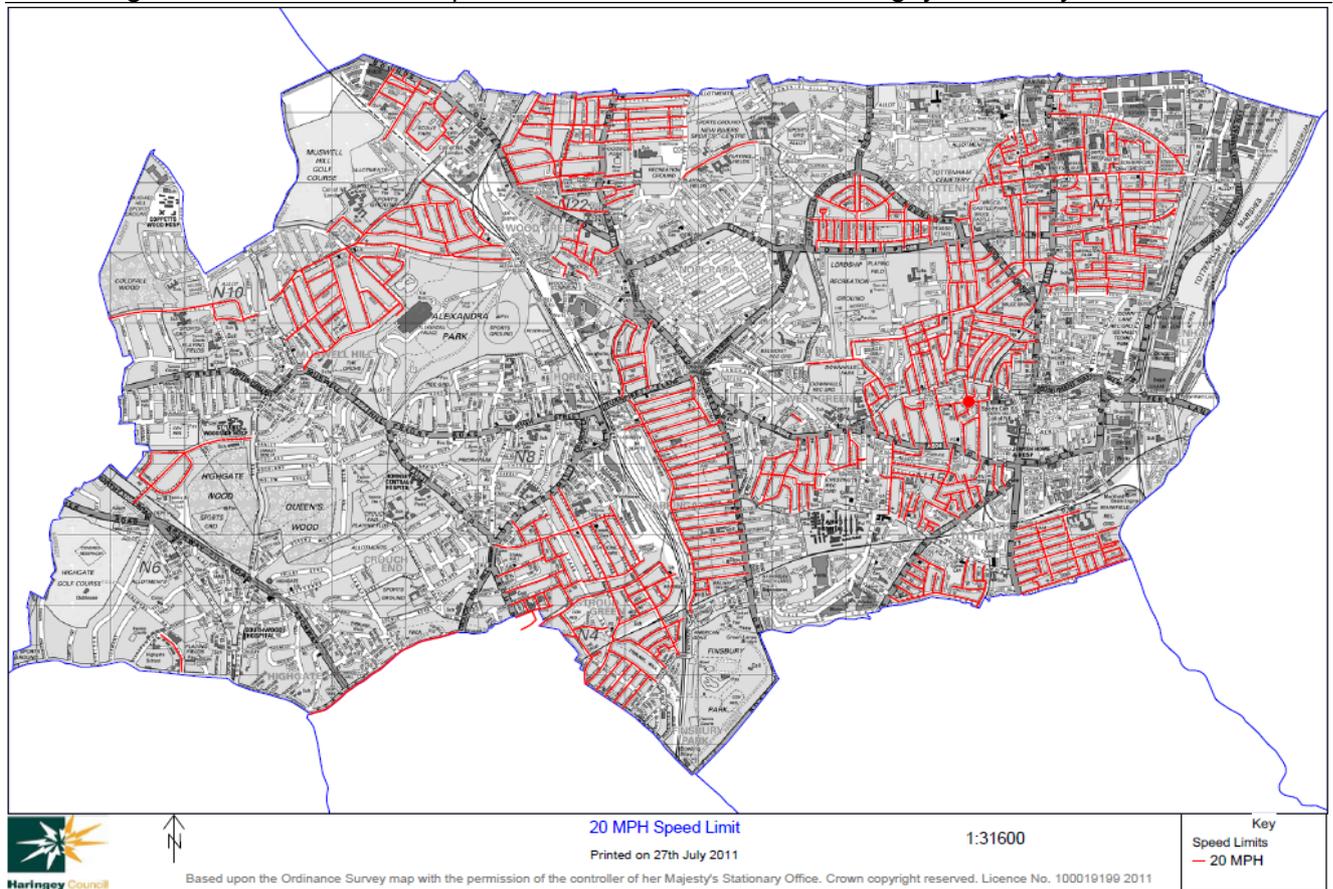


Figure 3.2 shows the 20 mph zone residential areas in Haringey as of May 2011.



Our programme for future years will be for environmental streets/20mph zones in Hornsey area [incorporating the area between Park Road, Tottenham Lane and Hornsey High Street/Priory Road], and the Warwick Gardens (Harringay Gardens area), and Noel Park estate adjoining Wood Green High Road. Overall allocated funding planned between 2011 and 2014 is £500,000. Additional funding will be allocated for this programme from 2014/15 onwards.

Haringey's 20mph zones are designed to be self enforcing through the implementation of associated traffic calming features, including physical speed restrictions, kerb build outs, measures to improve pedestrian and cyclist safety and environmental improvements.

In the summer of 2011 the Council undertook a Scrutiny Review regarding proposals to consult residents on introducing a borough wide default 20 mph speed limit for all side roads. Council members decided against this proposal on the grounds of:

- Cost. This proposal would require approximately £3.2.m to cover 60% of Haringey's roads. Such funding is currently unavailable.
- No clear evidence that the introduction of a 20mph limit will significantly reduce road casualties (as the majority of accidents take place on main roads which would not be covered by the 20mph limit restrictions).
- Lack of enforcement. Enforcement remains an important consideration and would be essential where speed could not be controlled by physical measures. Only the Police can enforce speeding restrictions and it is not a priority for them to address.

However, Council members agreed to review this decision in the future when there is more evidence to support borough wide 20mph limits and when there is additional funding available.

3.3.2 Cycle projects and programmes

Our projects and programmes to encourage more cycling in the Borough would support LIP objectives 1,2,3,5,6,7 and 9.

Haringey Biking Borough strategy

In 2010, Haringey was awarded £25,000 funding from TfL to develop a biking borough cycling strategy to identify measures to increase cycling rates in the borough, through a series of targeted cycling projects. The Council's status as a Biking Borough will increase the focus on encouraging cycling.

The Council is allocating a total of £770.5k funding (£450k LIP and £320.5k TfL-non LIP funding) for the delivery of the Haringey's Biking Borough strategy between 2011 and 2014.

The delivery programme for biking borough strategy will focus on the following key themes:

- Creating cycling hubs
- Cycling Communities
- Borough wide measures
- Promotional measures to raise cycling profile & broaden the appeal of cycling.
- Integrating cycling provision

Improvements to all aspects of Haringey's cycle network and facilities will be prioritised in the LIP delivery plan for 2011-2014 through the Bike Borough programme of works and the cycle training and cycle parking programmes

This funding will be used to promote Bikeability cycle training in schools, cycle route infrastructure improvements, cycle parking, workplace travel planning interventions, cycle safety and security initiatives, bike recycling scheme, cycle rangers project, cycling for health scheme and cycle community project as well as staff costs.

Cycling hubs

Primarily focus will initially be on developing a cycle hub around Wood Green/Turnpike Lane town centre where potential for a shift to cycling is greatest and resources can be targeted. Cycling hubs are catchment areas around major district centres which are focal points for employment, shopping and services and public transport nodes. As such they are a focus for commuter trips, local utilitarian trips (to the shops, post office or meeting friends) and local journeys to school. The hub provides the opportunity to focus substantive infrastructure measures in a concentrated geographic area in order to improve the attractiveness of cycling to a variety of markets. This will be complemented by intensive application of a range of marketing and promotional activities.

Potential Cycling Hubs could also be development in:

- Tottenham High Road
- Seven Sisters
- Muswell Hill
- Crouch End

Infrastructure Measures:

It is envisaged that the Cycling Hubs will feature infrastructure measures such as:

- A network of cycling routes;
- Engineering works such as advanced stop lines, cycle lanes, toucan crossings and raised tables at junctions to enable continuous, safe and comfortable cycling on this core network;
- Traffic management measures to control on-street car parking, especially around junctions and key destinations such as schools;
- Improved permeability
- Improved signage,
- Provision of plentiful secure parking at key public destinations;
- Investigate potential for provision of managed secure parking facility at a cycle hub or key node, such as a public transport interchange, which will offer secure parking, bike maintenance, hire etc.
- Investigate feasibility and potential demand for introducing the London cycle hire scheme in the hub.
- Cycle parking grant for public amenities – provision of cycle parking grant system to support installation of cycle parking at public facilities (such as sports clubs, community centres, GPs surgeries etc.)
- Trial on-street residential cycle parking in one area (housing area with limited storage facilities).
- These infrastructure measures will be supported by an intensive promotional and marketing campaign in the Hub Area.

Creating Cycling Communities

The Council is planning to establish cycling communities in Haringey to increase the take up and frequency of cycling, through the delivery of the following initiatives:

Outreach project to encourage new cyclists

Currently, there are sections of the community in Haringey that have particularly low levels of cycling. As well as women, some ethnic communities are particularly disengaged with cycling. The Council intends to deliver an Outreach project to:

- Organise events and activities for families
- specifically outreach to community groups to attract adults to cycle training, especially women,
- Develop family cycling project work including showing what equipment is available such as child seats
- Identify 'cycling champions' from those involved in above initiatives
- Survey participants for their attitudes on cycling and what they see as the priorities for Wood Green (and / or another area of Haringey)

This Outreach project will be delivered in partnership with:

- (i) Schools
- (ii) NHS
- (iii) Haringey Cyclists / London Cycling Campaign

Also, work on the *Cycling on Prescription* NHS project (below) can be used to aid with outreach in this project.

Cycling on Prescription

Schemes that refer patients on to cycle training and group rides have been successful around the country at treating a variety of disorders, such as depression, anxiety, diabetes, cardiac rehabilitation, hypertension, minor injury recovery, obesity and being overweight.

Haringey will work with the local NHS/PCT to identify suitable GP practices or consortia who are keen to trial a scheme of linking training to green spaces, traffic-free rides, volunteer involvement (for proven effective support) and group cycling activities.

Bike recycling scheme

Establish the recycling scheme to be run through a community organisation [bike shop, voluntary organisation, police or similar] to enable inexpensive provision of bicycles to residents in the Cycling Hub.

Volunteer Rangers

This project aims to engage with local volunteers to gain suggestions for low-cost solutions that will make cycling easier in the local area of the Hub (Wood Green). The three aspects to the project – (a) fault reporting, (b) permeability, and (c) cycle parking – provide an opportunity to gain accurate information from local people at a good value cost to the borough, while at the same time enabling local people to contribute constructively to cycling improvements, creating a sense of ownership.

Haringey will link this project with cycling organisations (the CTC and LCC) to make best use of resources already in existence such as memberships, websites to link to, and publicity in order to get people involved and to promote cycling.

In the Wood Green area the project will aim to recruit 10 Rangers, in order each year to: (a) identify 50 faults and fix 50% of them within 6 months; (b) gain 15 'permeability' suggestions; (c) gain 30 cycle parking reports (new / improved parking). Implementing (b) and (c) will be a core part of the Biking Borough programme in the Hub area.

Part of the project is engaging with people in the cycle hub area who cycle to work, and in this way it will link with the development of workplace travel plans.

Borough-wide Measures

In addition to the focus of investment in the Cycling Hubs, a series of Borough wide measures will be pursued to gradually extend and enhance the Borough network (including LCN, greenways and other local routes). These will include:

- Network development - incorporating LCN, greenways and cycle superhighways, as well as more localised links; identify gaps in this network and measures to resolve them, funded in conjunction with a broader transport scheme or in association with new development. Further details regarding the development of the LCN and Greenways routes and linkages to the cycling Superhighways are detailed below.
- Traffic management – through traffic calming schemes, 20mph zones, permeability measures, incorporating cycling facilities into junctions to allow safe and convenient passage through difficult points on the network;
- Integration with broader transport schemes - Auditing all relevant transport schemes for 'cycleability'.
- Increase cycle parking and security

Promotional and marketing measures to encourage cycling

Marketing and promotional measures to raise awareness, challenge attitudes and ultimately encourage behaviour change towards more cycling. These measures include background marketing to promote the benefits of cycling to Haringey residents, campaigns targeted at different target groups, events and other initiatives to enable target groups to 'try out' cycling. It also includes initiatives as part of established smarter choices programmes, such as employer and school travel plans, and Bikeability training. It is also envisaged that, where appropriate, specific initiatives may be developed with target groups, such as health referrals and other community-based groups. In addition, there is a need to broaden the appeal of cycling to women, older people, and black and Asian people.

Integrating cycling provision

The Council will:

- Integrate cycling into broader Council policy, planning and development control and that opportunities to run health-related projects in partnership with the health sector are exploited.
- Ensure that all travel plans incorporate cycling promotion and are adequately implemented / enforced.
- Ensure a robust Section 106 process is developed where appropriate potential cycle schemes in a local area are identified, so that s106 contributions can be requested and invested speedily.

Delivery:

Indicative funding provision for the delivery of aspects of the biking borough strategy has been provided through the corridors and neighbourhoods programme, as detailed in the Programme of Investment table in Appendix G.

Aspects of the biking borough strategy, including the provision of cycling hubs can also be part funded through the submission of Major Scheme proposals. Additional funding opportunities will also be sought from developer contributions as a condition of planning approvals, through Section 106 agreements.

The Council will ensure cycling provision is integrated into all corridor and neighbourhood schemes and promoted through the smarter travel programme. The Council will also explore funding opportunities developed through partnership working to promote cycling, such as working with Haringey NHS and the health sector to support cycling projects that have a positive health outcome

The Council consider cycling investment offers excellent investment pay back. Cycling England has developed a good evidence base from the Cycling Demonstration Towns to show that, on a conservative assumption, cycling schemes typically provide a 3:1 return on investment. It will be important to ensure effective monitoring in order to demonstrate the benefits of cycling schemes.

Monitoring:

A coordinated approach to monitor cycling in Haringey has been devised, using six key performance indicators:

- Level of cycling
- Parked cycles
- Qualitative data on cycling
- Percentage of children cycling to school
- Percentage of employees cycling to work
- Success of initiatives – use of questionnaires to provide feedback & assess attitudes to cycling.

Annual monitoring will take place detailing cycling levels, cycle theft, monitoring of cycling road casualties and cycle parking facilities.

London Cycle Network and Greenways route development

Haringey is one of the leading boroughs in London for implementing local cycling routes, including the London Cycle Network (LCN), and the delivering cycle facilities and cycle training.

London Cycle Network

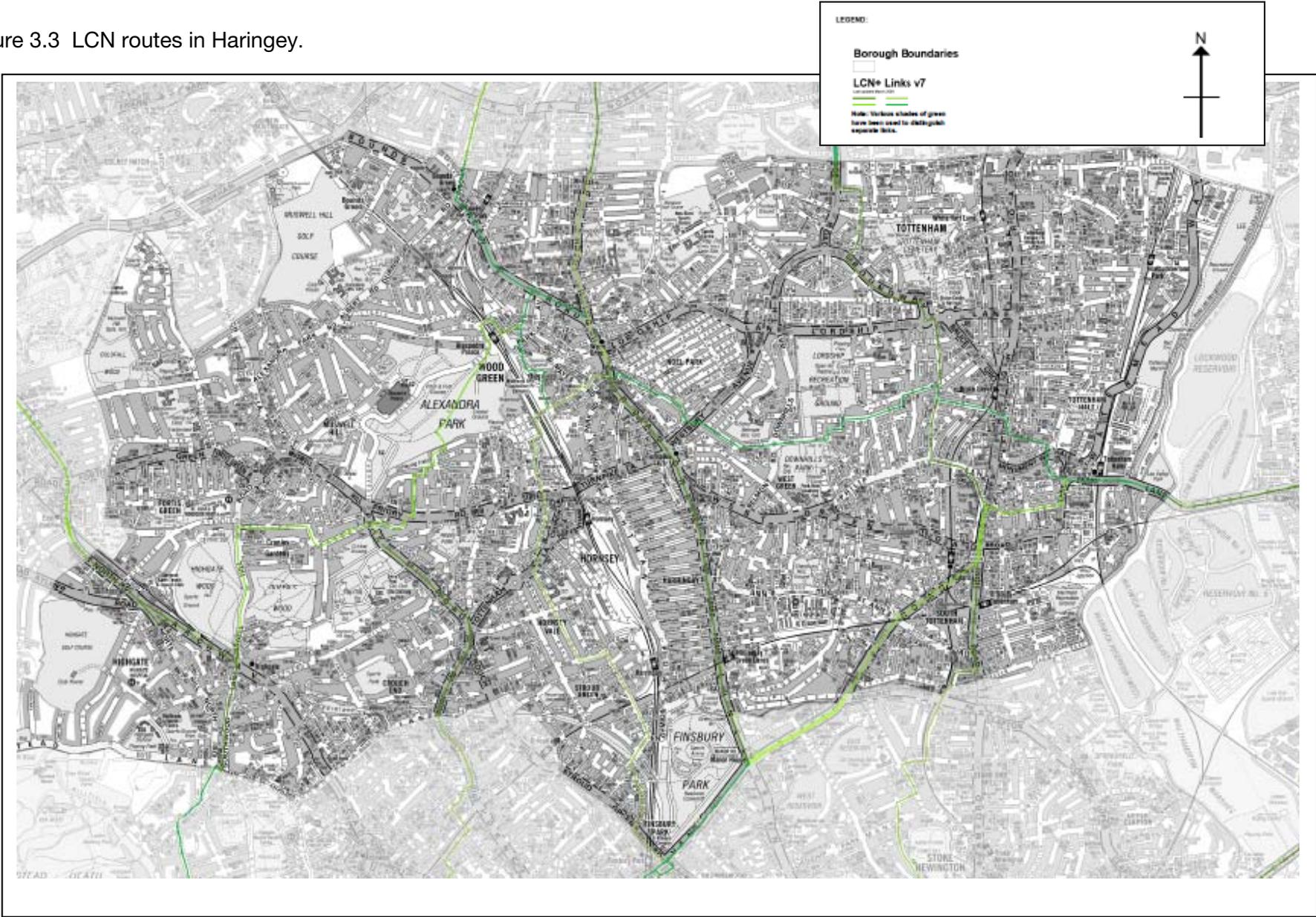
Figure 3.3 details the LCN routes in Haringey.

Priorities for completing these LCN routes, in order to improve connectivity of the links into the Wood Green Corridor are as follows:

1. Link 78. Finsbury Park to Green Lanes at the Enfield Boundary. Traffic calming measures, entry treatments at Tottenham Lane and Caxton Road, signage, cycle lanes. Priority to improve path at Cross Lane, Hornsey. Funding required is £150k.
2. Link 79. Wood Green to Tottenham High Road. Traffic calming measures, widening carriage, cycle lanes, signage, lightening, construction of new cycle path to improve connectivity, shared use space in Wood Green High Road. Funding required is £240K.
3. Link 81. A1/Muswell Hill Road to Alexandra Park Station, via Cranley Gardens, Park Road, Priory Road, North Road, Alexandra Palace and Buckingham Road. Cycle Lane in Buckingham Road to link 78. Spur to Muswell Hill from Muswell Hill road.
4. Entry treatments. Cycle/pedestrian crossing at Park Road/ Cranley Gardens. Entry to Alexandra Palace, Cycling refuge and new cycle track linking station road across Buckingham Road Bridge. Funding required for completion £462K.

The development of the local cycle network will complement and improve access to the planned two cycle superhighways running through Haringey, which are discussed below.

Figure 3.3 LCN routes in Haringey.



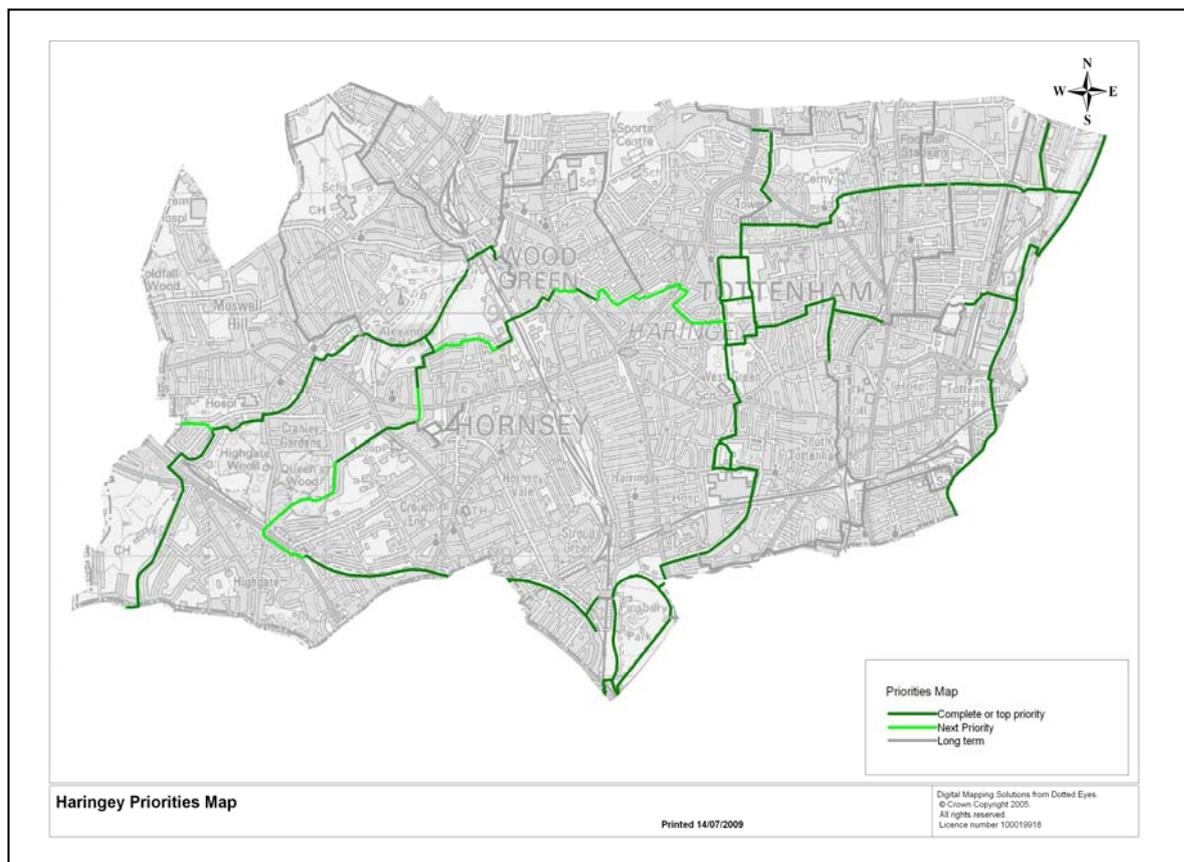
Greenways

The Council is supporting the development and implementation of Greenways cycle and pedestrian routes. Four links are being developed:

- Link 1 Parkland Walk south [between Highgate and Finsbury Park]
- Link 2 Parkland Walk north [between Muswell Hill and Muswell Hill Road]
- Link 3 Finsbury Park to Lee Valley
- Link 4 Highgate to Alexandra Palace Park

CRISP studies have been completed for all the links and links 1 and 2 are complete. Greenways priorities are shown in Figure 3.4, below.

Figure 3.4. Greenways route and priorities for completion.



Greenways priorities 2011/12 – 2012/13:

1. Complete a circular route in Lordship recreational ground to compliment the existing Greenways route which was completed in 2007/08. Reconstruction and widening of the path in Lordship Recreation Ground. The Council will seek to obtain funding to complete implementation funding for these works from the Lordship Recreation Ground masterplan.
2. Implementation the eastern section of Greenways link 03 from Lordship Recreational Ground to the Lee Valley via Tower Gardens, The Roundway, Church Lane, Park Lane, and Watermead Way. Works will include a crossing on the Roundway, signage and logos, and cycle lanes along Park Lane and a crossing at Shelbourne Road. Cost

£230,000 (with an expected Section 106 contribution of £161,000 from the Spurs football ground development).

3. Implementation of central section of Link 4 between Wood Vale and Alexandra Palace. Works will include a crossing at Park Road and Priory Avenue, dropped kerbs between Park Avenue North and South View Road and parking restrictions. Funding required to complete this section of the link is £374,000.

Sustrans are leading on the management of the programme on behalf of TfL. We are working closely with Sustrans to develop a medium/long term programme.

The Council's Sustainable Transport department hold regularly meeting with the Haringey Cycling Campaign to consult on the development of the local cycle network, transport infrastructure and other cycling improvement issues. These issues are also raised through the Transport Forum and the Scrutiny Review of sustainable transport.

Cycle Superhighways

TfL are implementing 12 cycling superhighways with the aim of providing fast, direct routes into central London from outer London. The project is one of TfL's key schemes for encouraging a London cycling revolution to achieve a 400% increase in cycling in London by 2025 (compared to 2000 levels).

The aim of the cycling superhighways is to improve cycling conditions for regular cyclists, encourage a modal shift to cycling and help reduce traffic congestion and emissions, relieve public transport congestion, and encourage healthy exercise.

In Haringey there are two cycling superhighway routes (1 & 12) planned. 'Route 12' will run from East Finchley to Angel, via Muswell Hill and Highgate and on to the Archway Road which is scheduled to be completed in October 2013 and 'route 1' will run from Tottenham High Road (via South Tottenham) to Liverpool Street which is scheduled to be completed during 2014/15.

A Memorandum of Understanding has been agreed with TfL to deliver the 'route 12' project in Haringey.

The LIP programme of investment will complement the implementation of the Cycle Superhighways by encouraging the uptake of cycling for commuting and school journeys. The Council will work with workplaces, schools and residents within the vicinity of the cycle superhighways to encourage the uptake of cycling. This will be progressed as part of Haringey's Smarter Travel programme through:

- the development of travel plans, installation of secure workplace cycle parking and cyclist facilities (showers, lockers, and local cycle maps).
- On and off street cycling parking facilities
- Provision of cycle training and bicycle maintenance sessions.
- Marketing and promotional measures to raise awareness, challenge attitudes and ultimately encourage behaviour change towards more cycling.

London cycle hire scheme

The London cycle hire scheme commenced in summer 2010 in Central London. This will be a 24 hours public bicycle sharing scheme for short journeys in and around central London.

The MTS proposes to introduce further cycle hire schemes in inner and outer London. Haringey Council would welcome the consideration of a cycle hire scheme as part of a cycle hub in Wood Green, as identified in Haringey's Biking Borough Strategy.

Cycle training programme

Haringey Council support cycle training for school and individuals who live, work or study in the borough.

Since 2008/9, the Council has contracted out the cycle training provision to Cycle Training UK. Cycle training is provided to mostly to bikeability level 2 certification, which enables the cyclist to demonstrate the ability to ride safely and confidently on the local road network.

Surveys carried out by the Council show cycle training increases cycling usage and improves safety and confidence for cycling on busy roads.

From 2009/10, all cycle training is provided in group sessions, except for complete beginners. This approach will enable the cycle training budget to provide training to more schools and individuals with the aim of achieving the London target of 100% training by 2012 through Bikeability.

Bicycle Maintenance Sessions

To complement the group cycle training sessions in Haringey's parks, which commenced in the summer of 2009/10, the Council intends to continue to provide bicycle maintenance sessions which enable residents to bring their bicycles along for maintenance check ups and cycling advice. This encourages infrequent and non cyclists to repair their bicycles and exercise through cycling.

Cycle parking programme

Our programme supports the Mayor's priority for cycle parking.

Since 2004, Haringey Council has installed over 430 cycle parking stands across the borough. In addition secure estate parking has been piloted at four locations in Tottenham and Muswell Hill as it is recognised that secure cycle parking at the home end is also key to greater cycle usage. £65k funding has been allocated from the LIP budget and to continue this programme of cycle parking stands between 2010-2014.

The Council has several policies and LIP delivery plans actions relating to the implementation of cycle parking, as follows:

- Installation of cycle parking at major destinations across the Borough including shopping centres, employment areas, public amenities including leisure centres, libraries and parks.
- Enhanced cycle parking at rail stations and key nodes free of charge.
- Provision of on and off street secure cycle parking on housing estates.
- Delivering workplace and school cycle parking through working with employers and schools to the implementation workplace /school travel plans.
- Requirement for cycle parking provision at all new workplace, school and residential developments.
- Increased cycle parking capacity through delivery of Biking Borough Strategy

By March 2014 the borough will deliver approximately:

1. 200 short stay cycle parking stands at on and off street or public facilities (e.g. supermarkets, hospitals/doctors and housing estates)
2. 30 secure cycle parking spaces (e.g. train stations, town centres, housing estates,
3. 200 secure, covered cycle parking spaces (at workplaces, school's, residential including new developments)

Table 3.2 displays the annual cycle parking installation figures to be delivery over the 3 year period 2011/12 to 2013/14

Table 3.2: Annual cycle parking delivery figures

Cycle parking facilities	2011/12	2012/13	2013/14	Total
Short stay cycle parking stands at on & off street locations	60	70	70	200
Secure cycle parking spaces (e.g. train stations, town centres, housing estates)	10	10	10	30
Secure, covered cycle parking spaces (at workplaces, school's, residential including new developments)	60	70	70	200
Total	130	150	150	430

3.3.3 Controlled parking zones (CPZs)

The programme would support our objectives

The availability of parking is a key determinant of car usage and local traffic congestion which can affect the potential uptake of more sustainable modes of travel.

Local parking policy is an important demand management tool in controlling local traffic congestion and influencing choice of transport. CPZ's are one of several parking policies, along with low parking standards for new developments, charging, and use of workplace parking levies, which can be used to influence travel behaviour. CPZ's specifically prioritise parking for residents and can ease local parking pressures, reduce traffic congestion, improve road safety and encourage the use of more sustainable forms of transport.

As of 2011 Haringey has introduced 16 CPZs and to manage competing pressures for limited parking supply in areas of high parking demand, around rail /underground stations, commercial/shopping areas and around Tottenham Hotspur football ground during matchdays.

Additional parking pressures are often experienced in residential streets close to an existing CPZ boundary, due to displaced non residential parking. This generates demand to expand existing CPZ's and gives consideration to the need for a borough wide CPZ, as exists in other boroughs such as neighbouring Islington.

Stop and shop parking bays have been introduced in various areas throughout Haringey to encourage more shoppers to visit area by making more parking spaces available for a limited time though the use of pay and display facilities.

The MTS specifically supports the expansion of CPZ's in London and Haringey Council will continue to introduce new or expand existing CPZ's where residents are affected by increased pressures on limited parking supply. Figure 3.3 shows the existing CPZ's in the borough. Our proposals will be linked in with other transport programmes where feasible, such as the implementation of car club bays and on street electric charging points as part of the CPZ expansion programme.

The CPZ programme is funded internally by the Council and has an indicative allocation of £600,000 per year for 2011/12, 2012/13 and 2013/14.

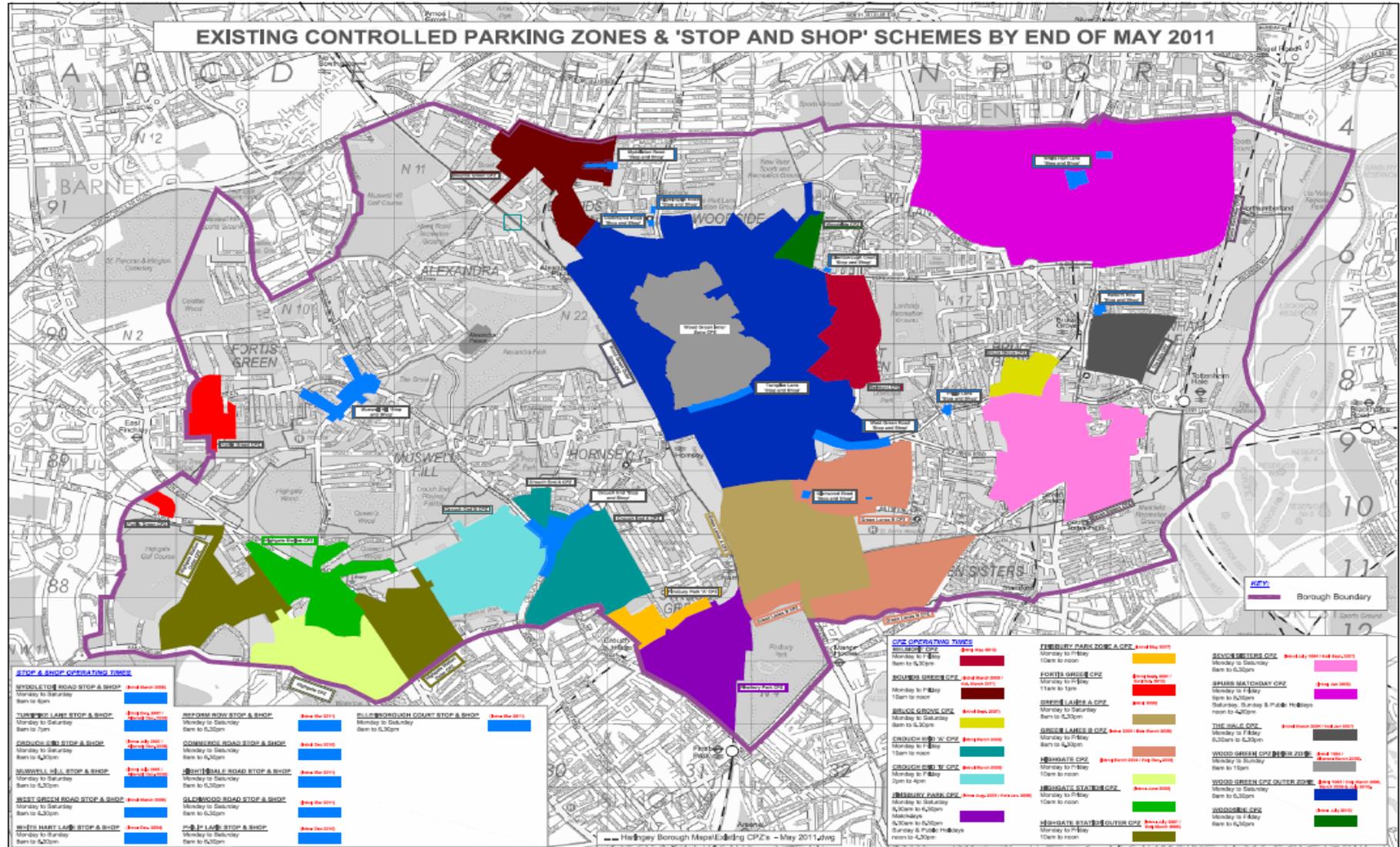
Table 3.3 CPZ programme for 2011-2014

CPZ	2011-12	2012-13	2013-2014
Stroud Green ward	Implementation and review		
Hornsey CPZ		Design and consultation	Implementation
Alexandra Palace Station		Design/consult	Implement

The Council are currently (summer 2011) reviewing its approach for identifying new CPZs to develop a strategic overview of parking policy and traffic management across the borough in order to deliver broad transport objectives to reduce traffic congestion and encourage sustainable transport usage.

In 2007 the Council reviewed CPZ parking permit policy and introduced a CO₂ emissions based permit charging structure, with lower emitting vehicles charged the lowest rate. This policy contributes to the Council's objective to reduce transport based CO₂ emissions, by encouraging residents to purchase lower CO₂ emitting vehicles.

Figure 3.3: Existing Controlled Parking Zones



3.3.4 Road Safety

The reduction in road user casualties is a key objective for the LIP [objective 4]. We will carry out specific interventions to reduce road user casualties with our priorities targeted at locations with the highest levels of casualties. Specific targets are set for mandatory indicators for reducing killed and seriously injured casualties as well as all casualties as described in Chapter 4, Performance Monitoring Plan. In addition the Council is setting targets for non-mandatory indicators for pedestrian casualties.

Improvements to road safety are part of our corridors/neighbourhoods programme as well as the major scheme for Wood Green. Measures to be pursued include pedestrian crossing facilities, speed reducing features, enforcement of speed limits with partners in Met Police, area wide treatments through 20mph zones/limits and environmental streets [see above], cycle facilities and road safety education, training and publicity programmes.

The Council is providing funding for local safety schemes through its revenue funding as it is considered a high priority for the Council.

We recognise the value of child pedestrian training to support road safety objectives and will be continuing this as part of the LIP.

The Council commissioned a study to analyse Haringey's road casualty data and identify specific local safety measures and area wide traffic management measures to reduce road accidents, particularly focusing on vulnerable road users [pedestrians, cyclist, powered two-wheeler and child]. The study provides an evidence base for road safety education activities for the 3 year period 2011-2014 and has been used for target setting for reductions in road user casualties over the period of the MTS.

The study will inform the development of the local safety programme through:

1. Identification of overall patterns of casualties by location, road user and severity including clusters of accidents
2. Identification of trends in casualties by user and location
3. Analyse contributory factors, weather conditions etc for vulnerable road users
4. Identification of locations for treatment for vulnerable road users either specific local safety measures or traffic calming measures such as 20mph zones
5. Estimation of expected accident reduction savings from the identified interventions
6. Provision of recommendations for enforcement activities for discussion with Police and the Council.
7. Combined personal security improvements with complementary measures to address road safety

Following this study we will be concentrating road safety ETP work on children under 5 and their parents, children aged 11-15 and people living in the more deprived areas in the east of the Borough. This will build on the award winning work on reducing casualties among ethnic minorities attending mosques in Edmonton and in Haringay as well as current work focused on a community centre on St Ann's Road.

Reducing traffic speeds on the borough's roads are critical for reducing accidents and casualties and for encouraging a modal shift to sustainable transport, especially walking and cycling. Traffic calming can also assist in developing social and community networks in residential neighbourhoods segregated by high volumes of speeding traffic.

Bus Priority

Our work on bus priority measures would support LIP objectives 2 and 5.

As there is no dedicated allocation of funding towards provision of bus priority measures, we will seek to enhance bus service speed and reliability through our programme of corridors and major schemes. Our proposals for Green Lanes seek to improve bus service reliability by traffic management and appropriate parking controls. However, with increasing population and employment it will be increasingly difficult to maintain current bus journey time speeds and reliability.

The major scheme for Wood Green town centre would provide for improving bus reliability by infilling bus laybys.

Our overall strategy to minimise traffic generation and to reduce car usage through a programme of alternatives such as cycling and public transport enhancements would benefit the operation of bus services in the Borough.

3.3.6 Electric vehicle charging infrastructure

This work would support LIP objectives 2, 6 and 7.

Haringey Council is committed to promoting the uptake of electric vehicles and is implementing a programme of charging infrastructure in off street public car parks and on street locations in or near town centres, transport hubs and employment areas. 17 charging points have been installed as of May 2011 and a further 8 charging point spaces are planned for 2011/12. By the end of 2013/2014, the intention is for a total of 45 public charging points to have been installed by the Council, in public accessible car parks and on street. LIP funding through the neighbourhood and corridors programme has been allocated for this electric vehicle charging infrastructure for 2011/12-2013/14. Additional charging points will be installation as a condition of planning consents for new developments and will be funded through Section 106 agreements.

The Council are investigating the feasibility of drafting policy and safety guidance to enable residents with no off street parking to charge their vehicle on street, via use of a charging lead from their property which will need to be covered by a mat to remove any trip hazard potential.

Our programme will complement TfL's internal delivery team to deliver charging points in employer's car parks, station car parks, and private retailer (supermarket/ shopping centre) and leisure centre car parks. These figures are identified in TfL's 'Turning London Electric' strategy which has a target of introducing 25,000 charging points across London by 2015 although this may not be realised with reductions in TfL funding. The Haringey electric charging point membership scheme will be incorporated into the pan London membership scheme, managed by TfL to provide access to all London charging point from early 2011.

Plugged in Places funding

The Council is part of a consortium of London boroughs and 14 private and public sector partners, led by TfL, which has been successful in securing £9.3 million of DfT's 'Plugged in Places' funding over a 3 year period from 2010/11. During 2010/11, £5.5 million of this funding will be used to support the implementation of electric vehicle infrastructure in car

parks, major supermarkets, leisure and retail centres, as well as on the street across London, including Haringey.

In November 2010, Haringey signed the 'Plugged in Places' funding and membership agreement enabling the Council to claim 50% of the purchase and installation costs for new charging point installations from the Plugged in Places funds . The other 50% of these costs will be covered by the Council from LIP funding.

Pan London

In November 2010, TfL launched the brand and website for the new pan-London electric vehicle charging Membership Scheme called 'Source London' (www.sourcelondon.net). Membership of this scheme will enable the electric vehicle user to park and charge at any of the on-street and public car park electric charging points across the 21 participating boroughs, including Haringey.

The Source London scheme commenced operation in May 2011 and will replace Haringey's original electric vehicle charging scheme in the Autumn of 2011, once all Haringey's charging points have been retrofitted for compatibility with the Source London network. TfL will provide the administration and IT resources for the Source London scheme and the maintenance for the charging points, at no cost to the borough.

Source London members will pay a single annual fee of £100 in order to access all public charge points across the capital, including all Haringey's on street and public car park charging points, which will be retrofitted with the Source London branding by TfL. Members will also have access to a call centre for help and advice and to report any issues.

Electricity will be free at point of use to members, subject to any costs for parking set by each borough. The borough will pay for the electricity used (the cost of this will depend on usage and tariff, but if used for 8 hours a day, it is estimated that a charging point will use, on average, approximately £300 of electricity a year). TfL will monitor electricity costs with the intention to introduce a 'Pay As You Go' electricity charge in the future, however this scheme will only become cost effective to introduce when membership, and income, rise.

3.3.7 Car club scheme

This initiative would support LIP objectives 2 and 7.

The Council has a contract with a car club provider to develop a programme of on-street car club bays. The scheme commenced in 2009 and as of April 2011 there were 96 car club bays in Haringey. The Council have set a local target to have 150 car club bays by 2013/14. This will create a borough wide service where every resident and business would be within a 5 minute walk of a car club vehicle.

The introduction of on street car club vehicles in Haringey has been extremely popular. As of May 2011 there are over 4,000 Streetcar members in Haringey, representing a member growth of 240% in two years. The average daily usage figures for these vehicles is over 10 hours per day.

Future car club demand analysis suggests there is huge potential for car club expansion in Haringey with over 34,000 potential car club users. So far, car club provision in Haringey has only met 10% of this potential demand.

The Council considers increasing resident and business access to car club vehicles is an important policy for encouraging sustainable car usage. Using a car club vehicle is a step towards easing local parking problems reducing pollution and carbon dioxide emissions. Surveys of Streetcar members reveal the following benefits:

- Car club vehicles emit 36% less CO₂ than private vehicles disposed of by car club members, as car club vehicles are new, efficient and well maintained models (CarPlus survey, 2009).
- Car club members typically give up owning a first or second car on joining; others defer purchasing their own vehicle due to using the car club instead, resulting in less parking demand and congestion in that local area.
- Surveys of Haringey's car club members reveals that up to 1040 private vehicles have been sold as a results of residents joining the car club scheme and a total of 1080 planned vehicle purchases have either been deferred or cancelled across the borough. (Streetcar Haringey annual performance report 2010)
- Haringey's streetcar members are driving on average 68% less than before they joined the scheme and are using public transport 40% more (Streetcars membership survey, 2009).

The Council will continue to work in partnership with our contracted on street car club operator, Zipcar (previously called Streetcar), to expand the number of car club vehicles in the borough.

The Council has received £50k TfL (non LIP) funding to deliver 20 new car club locations in 2011/12 and 30 new car club locations in 2012/13. This funding will also contribute to the cost of Streetcar purchasing an electric vehicle for use as a car club vehicle in Haringey. The vehicle will be stationed at one of the EV charging points proposed on the public highway.

Figure 3.4. Car club locations in Haringey

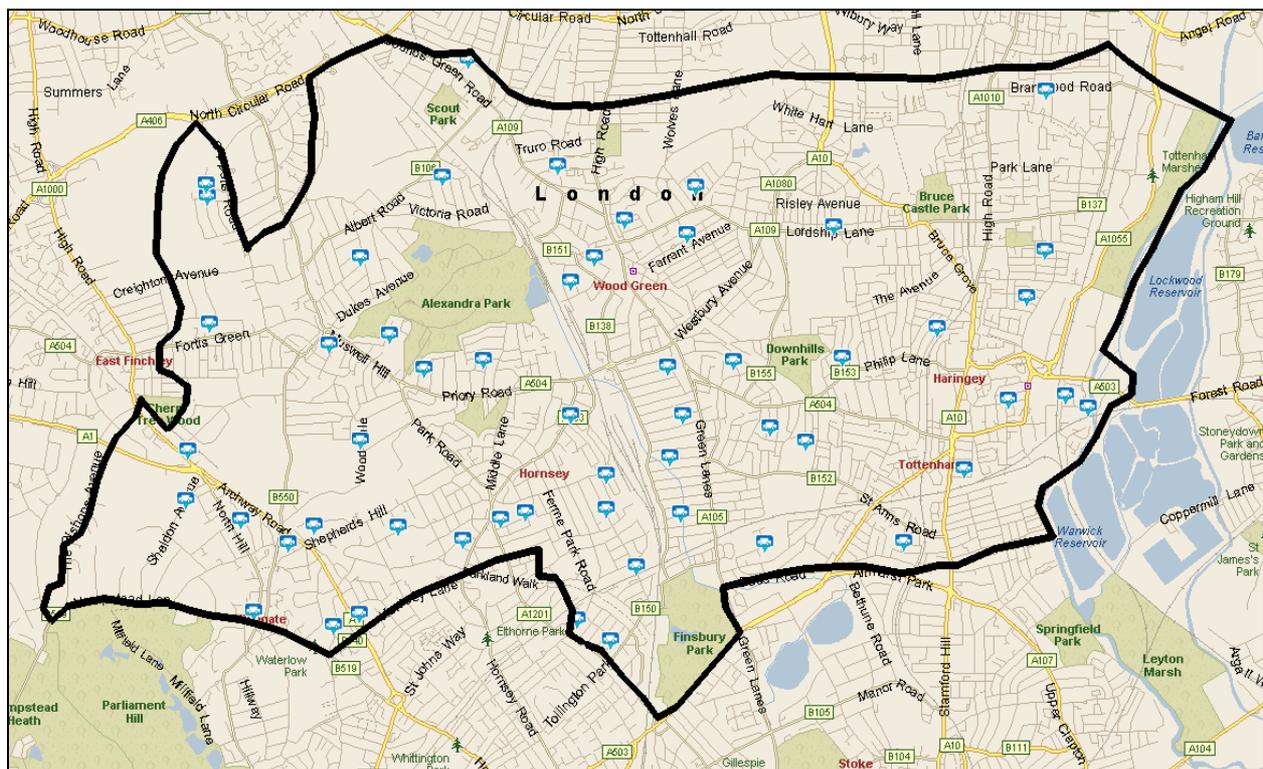
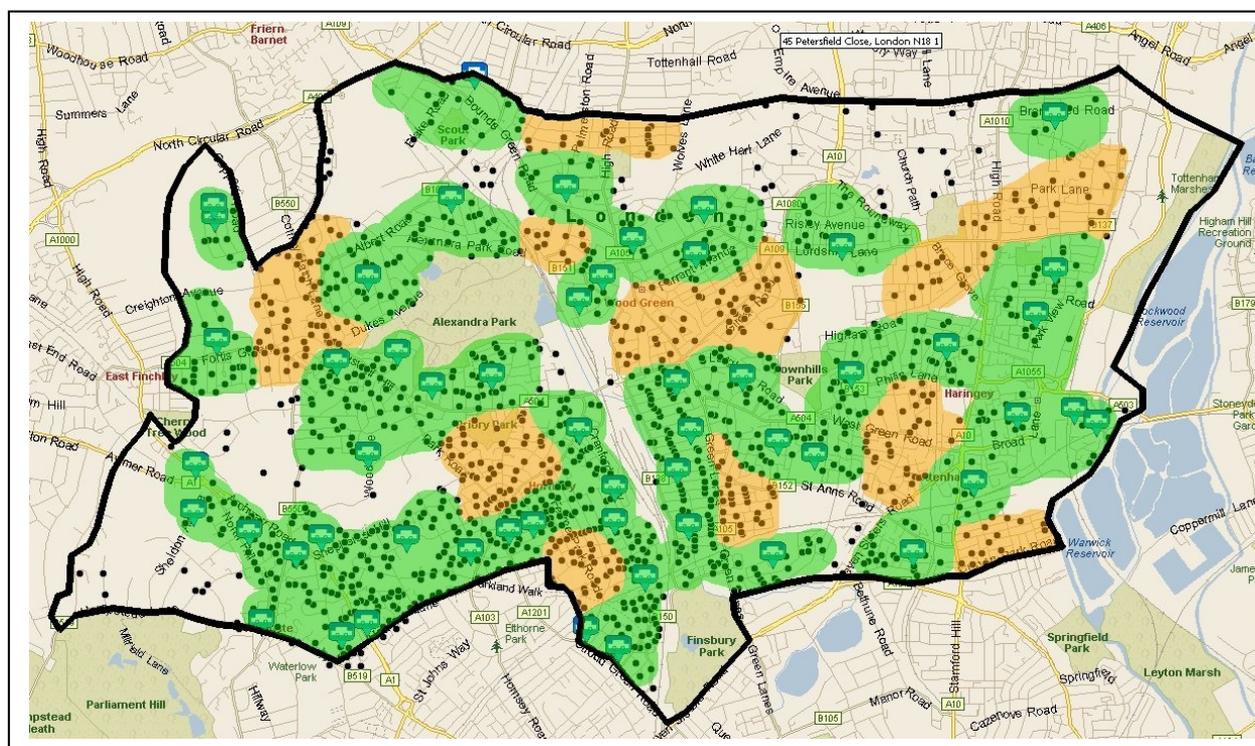


Figure 3.5, below shows the current spread of membership across Haringey and the location of existing car club vehicles. The areas shaded in orange show where there are high numbers of Zipcar members where there is currently no existing car club vehicle close by. It is within these areas where new car club locations will be identified. This clearly shows the demand and potential for expansion of the scheme and the Council are planning to create a borough wide service where every resident and business would be within a 5 minute walk of a car club vehicle by the end of 2010-2011. Based on projected car club membership growth Zipcar is confident that 5,000 Haringey residents will be members by the end of 2011 and 6,500 by the end of 2012.

The Mosaic driver profile map for Haringey, (see Figure 2.5, in Chapter 2) highlights the need for further car club expansion in the east of the borough, to improve accessibility for the population who aspire to driver. If access to a car club can assist in addressing these aspirations, then future car ownership levels can be sustained at levels which will not adversely contribute to increased congestion or parking pressures.

Figure 3.5. Zipcar membership and demand.



The Council is in continued discussions with Zipcar to introduce cleaner, alternative fuelled vehicles, to the Haringey car club fleet, such as hybrid or electric. However, for the operational requirements of a car club, this is dependent on a suitable electric vehicle becoming available with adequate battery mileage range and a quick charging potential to ensure it is a viable option for the high usage demands of a car club vehicle. The majority of Zipcar's current fleet of vehicles consist of Polo BlueMotions emitting 104g of CO₂ and Golf BlueMotion emitting 119g of CO₂. These emissions figures are comparable with hybrid vehicles such as the Prius and, by using conventional technology, have none of the downsides, such as battery disposal.

3.3.8 Supporting Haringey's Air Quality Action Plan

The air quality plan would support LIP objectives 2, 3, 6, 7 and 11.

The dominant source of emissions of NO_x and PM₁₀ in Haringey arises from road transport. Proposals contained within this LIP aimed at lowering traffic volumes, easing congestion and encouraging a modal shift to sustainable transport will significantly contribute to improving Haringey's air quality, and specifically lowering NO_x and PM₁₀ levels. These measures will be implemented where practicable at the priority air quality hotspots with the priority corridors and neighbourhoods.

Urban realm and corridor improvements, which encourage a modal shift from car usage, to sustainable modes of transport, including walking, cycling and improved access to public transport. The introduction of CPZ's are an important tool for discouraging car usage for short journeys. School and work place travel plans encourage modal shift from car usage to cleaner and zero emission modes of transport and the more sustainable car usage, share as car sharing.

The Council's travel plan promotes several initiatives to reduce vehicle emissions including the introduction of electric vehicles for use in Council related activities, modal shift measures to reduce car usage and smarter working practices aimed at reducing the need to travel for work related journeys and commuting.

The Council's fleet is LEZ compliant, i.e. Euro III standard or higher. Contracted out services using LGVs and HGVs such as street cleansing and waste collection vehicles, are also compliant with the requirements of the LEZ. This work supports the Mayoral priority for cleaner local authority fleets.

Promoting behavioral change is an effective and relatively quick method for reducing vehicle emissions by providing the necessary information to make smarter travel choices. This includes travel awareness initiatives to educate on sustainable car usage and efficient driving techniques to reduce fuel consumption and vehicle emissions. Expansion of car club scheme, which encourages membership to sell their own vehicles and drive less, in often clean and more efficient car club vehicles. Expanding the network of electric vehicle charging facilities provides the practical infrastructure required to support the uptake in electric vehicle ownership. Traffic calming and smoothing measures, including re-phasing of traffic signals, to reduce traffic speeds and congestion from stop-start queuing traffic, especially in the poor air quality hotspots.

3.3.9 Street tree planting

The Council is keen to support the introduction of street trees in line with Mayoral priorities.

Planting street trees bring numerous beneficial properties including the ability to filter out particular matter and absorb CO₂ and other vehicle emissions, provide a barrier to noise pollution, improve the aesthetic appeal of a neighbourhood or corridor and support biodiversity by providing an essential habitat and wildlife corridor.

Haringey Council has been successful in obtaining funds through the Mayor's Street Trees Grant programme in both 2008/09 and 2009/10 to plant new trees.

In 2008/09, 250 trees were planted and in 2009/10, 144 were planted. All these street trees were planted in the east of Haringey, including Northumberland Park, Tottenham Green and Tottenham Hale.

The Council will consider the scope for the appropriate planting of street trees as part of all infrastructure improvements, particularly those involving public realm enhancements and as part of traffic calming measures.

Increasing the number of trees and vegetation (urban greening) in Haringey will also contribute to climate change adaptation and mitigate providing shade and absorbing rain water runoff.

3.3.10 Freight

In north London there is potential to increase water-based freight transportation activity using the London Blue Ribbon Network. In particular, the Lee Navigation Canal, provides a significant opportunity for water based transport, including the transportation of waste.

Haringey Council will seek to work in partnership with neighbouring boroughs, through the North London sub regional partnership, TfL and British waterways to identify the feasibility for potential for water based freight transport along the blue ribbon network in North London.

Freight Quality Partnerships, as successfully introduced in the Brimsdown industrial area of Enfield, have the potential to mitigate the impact of freight in residential areas whilst still allowing efficient servicing of industrial and commercial areas. Information for HGVs drivers, better management of routeing of HGVs, accreditation of freight operators would be considered as part of an FQP. A FQP would be considered as part of Wood Green town centre.

3.3.11 Smarter Travel – Influencing travel behaviour

The Council consider smarter travel initiatives, which focus on encouraging people to change their travel behaviour to more sustainable modes, offer the greatest scope for reducing the impact of motor traffic and encouraging a modal shift to sustainable transport. The smarter travel programme supports LIP objectives 2,3,6 and 7.

This approach is supported by the results of smarter travel programmes undertaken in the London Borough of Sutton, and DfT's 3 Sustainable travel towns initiative (Peterborough, Darlington & Worcester) which both recorded significant modal shifts in travel behaviour with car usage down over 10% and walking and cycling rates increased. This modal shift had also contributed to a reduction in traffic congestion and annual carbon emissions and an increase in the levels of physical activity.

The Council is developing a joint smarter travel programme with TfL and Enfield Council to deliver cross-borough smarter travel measures. Actions to reduce car use can be most effectively delivered at a sub regional level as much car travel incorporates journeys across borough boundaries.

In developing our programme we have taken advantage of specialist expertise and databases used by TfL. The use of market segmentation data (MOSAIC) has been used to assess the effectiveness of types of interventions. Detailed analysis of this data is

contained in **Appendix J** and the following smarter travel objectives have been created from this data analysis:

- Increase levels of cycling
- Health and active travel
- Reduce the number of child accidents
- Improve air quality and reduce CO2 emissions
- Reduce traffic and congestion

The smarter travel programme will deliver these objectives by focusing on promotional and marketing activities, working to develop workplace and school travel plans, and promoting road safety in schools.

The main components of Haringey's smarter travel programme include:

- Marketing campaign including 'Smarter Travel' website
- Launch events for smarter travel initiatives
- School travel planning (modal shift and road safety interventions)
- Workplaces, Town centre and retail area (trip generator) travel planning
- Setting up neighbourhood champions (Doctors, Head teachers, youth works, faith groups, mum/toddler groups) to promote personalised travel planning and community projects
- Smarter travel roadshow promoting travel awareness and health
- Road safety education, training and publicity
- Safe and efficient driving / road safety campaign
- Supporting measures for cycling hubs, cycle superhighway and greenways routes
- Walking and cycling rewards (offer initiatives to travel sustainable for leisure and shopping trips)
- Promotion of sustainable car usage: Car clubs, electric vehicles, car sharing, and efficient driving methods.
- Monitoring programme to assess impact of smarter travel programme on modal shift. This will include traffic flow and modal shift monitoring plus attitudinal surveys to assess influences for behaviour change.

Haringey's smarter travel programme will be coordinated to complement measures delivered through the Neighbourhoods and Corridors programme to encourage sustainable travel behaviour and improve road safety. The programme will involve upskilling Council staff to deliver behavioural change techniques and programmes.

Successful delivery of the sustainable transport initiatives will be achieved through a coordinated programme which is informed by:

- Preliminary research to identify travel behaviours
- Establish clear objectives (i.e. modal shift, increasing walking, reduce car usage etc)
- Partnership working (including NHS Haringey, Schools, Sport England, Haringey Cycling campaign etc)
- Developed a balanced programme of initiatives (for walking, cycling, sustainable car usage etc)
- Targeting of interventions at those most likely to change travel behaviour (using Mosaic research)
- Initiatives delivered within a branded programme which is recognisable to local residents (based on TfL smart travel guidance)

School Travel Planning

The aim of developing school travel plans is to reduce the number of car trips to and from the school, remove barriers to sustainable modes of transport, promote active travel and to develop a community response to transport and traffic problems in the locality of the school.

The Council has been successful in increasing sustainable travel modes for school journeys through the development of the school travel plan programme. As of 2010, 100% of Haringey schools have travel plans in place and 78% of children in the borough currently travel to school by sustainable modes.

Haringey schools with travel plans in place have achieved an overall decrease of 5.4% in car use to school from 2004 to 2010. When this is broken down by school type, see Table 3.4, the largest proportion of this modal shift has come from the independent sector.

Table 3.4. School modal shift data.

School Type	% Decrease in car use
Primary	-6.25
Secondary	-2.53
Independent	-14.24

Haringey's 'Sustainable modes of travel to school' strategy identifies where additional work needs to be targeted to encourage further modal shift and maintain the progress already achieved in terms of increasing sustainable travel behaviour for school related journeys.

The School Travel Plan programme is developed from the recommendations of the 'Sustainable modes of travel to school' strategy and the Biking Borough Strategy, with the focus on the following key areas:

- Targeting schools with the highest modal share for car trips. Independent schools are responsible for the largest number of car trips within the borough. The car has a large mode share (35.90%), whilst cycling makes up just 0.40% of journeys. Independent schools usually have much larger catchments than state schools, as a result reducing the potential for the use of sustainable transport. In addition to encourage cycling and walking, the school travel team is promoting the use of park and walk schemes.
- Encouraging uptake of cycling to school to address potential demand. Surveys of pupils preferred mode of travel highlight that 25.87% stated their preference to cycle yet only 1.70% currently do cycle to school. This potential demand for cycling to school needs to be encouraged through the promotion of cycle training and cycling related activities at both primary and secondary school level.
- Surveys of school children identify that double the number of secondary school children who currently travel by car (almost 19%) would travel by car given the choice. This statistic represents a significant change from the attitudes expressed at primary school level. This highlights the need to focus sustainable modes of travel promotion in secondary schools to ensure the high levels of sustainable modes of travel by younger pupils are not lost in the transition to Key Stage 3 and 4 when young people are beginning to travel independently, and further, and approaching the legal age to drive.

- Schools within the Wood Green hub identified as part of the Biking Borough Strategy.

Barriers to sustainable transport

The following factors have been cited by pupils as reasons for not taking up sustainable transport:

- Personal preference/ Habit
- Safety concerns
- Physical barriers (Lack of public transport, crossings, cycle facilities etc)
- Personal arrangements requiring multiple drop-off or onward journeys to work.

A pupil's journey to school is greatly influenced by their or their parent's perception of how safe the route to school is. During the period 2004 to 2009 £1.8 million of safety schemes have been implemented, serving 35 schools. The Smarter Travel team will work with schools and parents to identify routes that are considered to be unsafe. Both changes in current infrastructure and the provision of new infrastructure will be used to improve the perception of safety on those routes highlighted as a problem.

The Safer Transport division of the Metropolitan Police identified behaviour whilst travelling on buses as a real problem. A pilot project called 'Busology' was used to address pupil's perceptions and beliefs about travelling to school by bus in 2008. We will continue to use Busology in secondary schools to promote good behaviour on buses and public transport.

We will continue to pursue ways of supporting pupils between 14 and 19 in a number of different ways, including:

- Promotion of free public transport, provided by TfL to students.
- Personalised travel advice for those pupils starting the Diploma.
- Provision of cycle training and the possibility of providing pool bicycles.

We will continue to assist schools in developing effective travel plans. This work will be targeted at schools within corridors/neighbourhoods programme to support our physical, engineering led measures to maximise the benefit of this investment. We will also be targeting schools with high level of car usage and schools within the Wood Green hub. A number of programmes will be continuing including Walk once a Week, support for transition packs [Upgrade scheme], Go Bike, Busology promoting good behaviour on buses and cycle parking.

Schools will be encouraged to work in clusters in order to maximise resources provided by the Council. Sharing of learning and expertise in promoting sustainable transport will also be encouraged between schools.

The Smarter Travel team will develop opportunities for partnership work within the HSP where there are shared policy objectives (i.e. active travel and obesity).

3.3.12 Workplace travel planning

At least 26% of all journeys in Haringey are work related, and, with approximately 8,900 businesses employing some 61,700 people (based on 2008 figures), workplace travel planning is of vital importance and provides a cost effective approach to promoting sustainable travel and tackling traffic congestion in the borough.

Haringey businesses have access to free advice and assistance in developing workplace travel plans - from the Council (and the North Central Travel Network until March 2011). Haringey Teaching PCT is the only major employer in the borough which has worked directly with TfL to develop a workplace travel plan. However, both the Whittington and North Middlesex University Hospital NHS Trusts have had some support from TfL/sub regional coordinators.

The Council will continue to encourage local businesses, LSP partners and other large employers (including hospitals) to develop and maintain travel plans. The Council will allocate LIP funding, annually, for the employment of a sustainable transport advisor to promote workplace travel plans and other sustainable travel initiatives through the North London sub regional partnership. This post would be shared with three neighbouring boroughs. Through this post, the Council will continue to provide advice and assistance for developing travel plans required as a condition of planning consent.

Travel planning advice will also be incorporated into an Environmental Audit Service to be launched for small businesses in the borough. Travel awareness activities will be integrated with corridor and neighbourhood schemes and events will be arranged for bike week, walk to work week and to promoting sustainable transport initiatives at public events.

The Council will also consider the provision of Smarter travel LIP funding to match fund or contribute to the cost of implementing measures identified within an approved workplace travel plan, up to a value of £2000. For example, the Council will consider providing a financial contribution towards addressing barriers to sustainable transport, e.g. the installation of secure cycle parking facilities, lockers or shower facilities.

The Council would seek to work with the North London sub regional partnership, Network Rail, train operating companies and TfL to develop travel plans for main line and underground stations in Haringey specifically to address:

- The barriers passengers face in accessing station by environmentally friendly means
- What prevents non-passengers from getting to the station at all
- The most cost-effective and environmentally friendly package of measures to improve station access.

3.3.13 Haringey Council's Staff Travel Plan – leading by example

The Council will continue to develop and implement further measures within its own staff travel plan. The Council is the largest single employer in the Borough with about half of its staff living within the Borough. Our own staff travel plan as part of our commitment to tackling climate change at a local level. The travel plan supports the council's ambition to become one of London's greenest boroughs and to lead by example by encouraging the use of sustainable transport and in protecting and improving the environment. The travel plan consists of a package of measures designed to reduce staff car usage and the need to commute and make work related journeys.

Since 2009, the Council's staff travel plan has had significant success, most notably reducing single occupancy car trips to work by 5% and increasing cycling to work by 2.5%.

3.3.14 Travel awareness initiatives

Through the Smarter Travel programme the Council will continue to organise and support a number of annual events to promote travel awareness and encourage sustainable travel behaviour through promoting the benefits of walking, cycling, using the public transport network and sustainable car usage.

LIP smarter travel funding will be allocated to support car free festival events, 'walk to work' week, 'bike week' and travel awareness promotion at the Council's annual green fair, and at annual community events such as the Lordship Festival and Tottenham Carnival. Funding will also be used to support bicycle maintenance sessions at sustainable travel events.

Travel awareness messages will continue to be including in Haringey Council's Greenest Borough Strategy awareness programme.

3.3.15 Partnership initiatives within Haringey Council & NHS Haringey

The Council's Sustainable Transport team will continue to work with external partnerships including NHS Haringey to deliver incentives which promote the health benefits of walking and cycling, including the following:

- **Active lifestyles programme in Schools.** Involves the distribution of pedometers and an associated walking programme to the least active children. Schools are chosen in liaison with the Healthy Schools programme. This is being lead by the Walk, Jog and Cycle officer.

- **Active For Life**

This is a partnership between NHS Haringey and Haringey Council's Sport and Leisure Services. It is a programme designed to help inactive people to become more physically active.

- **'Health in Mind'** Walk your way to health programme is another joint initiative between NHS Haringey and Haringey Council's Sport and Leisure Services. The organised walks are short 30-minute walks led by local people trained as walk leaders to offer support and encouragement. The health walks cater for all fitness levels especially those who have not been active for a while.

3.3.16 Accessibility: Community transport and Shopmobility schemes

The Council has introduced a number of new initiatives in recent years to improve mobility in the borough. This includes the introduction of a community transport scheme and support for a Shopmobility scheme for Wood Green. The future of Shopmobility provision is being reviewed and the Council is in discussion with Aged Concern Haringey regarding the future provision of the service.

We will be extending the Haringey Community Transport scheme to meet the needs of people unable to use conventional public transport as well as providing a service for local community groups. Some funding would be through the Local Transport Funding.

Bus Stop Accessibility (BSA)

The Council works in partnership with Transport for London to improve accessibility to bus services in the borough by implementing bus stop clearways at every bus stop, providing adequate height kerbs and removal of clutter and obstacles to ensure easy and efficient access for boarding and alighting buses. Continuation of the BSA programme will be funded through the 'Community Transport' and 'Local Transport schemes' LIP budget.

3.3.17 Reducing CO2 emissions from transport

Haringey has a LIP target to reduce CO2 emission from transport by 45.3% by 2025, detailed in Chapter 4.2. The LIP delivery plan contains several interventions and policies which will contribute to reducing CO2 emissions through encouraging a modal shift to sustainable travel and reduce the need to travel. These schemes include the smarter travel programme, biking borough initiatives, DIY streets, low carbon zones, car club and electric vehicle charging expansion, air quality improvements and the street tree planting programme. These schemes are covered in more detail elsewhere in Chapter 3.

Haringey's Carbon Management Action Plan

In addition to the LIP transport CO2 target, the Council is committed to delivering a 40% carbon reduction (for all CO2 emission sources) across the borough by 2020 (on a 2005 baseline) and is developing an action plan to achieve this target with support from the Department of Energy and Climate Change, Local Carbon Framework pilot (LCF). By developing a borough CO2 reduction plan it is intended that closer links between a number of wider sustainability objectives can be achieved such health, waste reduction, fuel poverty, transport, air quality and economic development. The action plan is due to be launched in autumn 2011.

To assist with the development of the Carbon Management Action Plan, Haringey Council has produced an Annual Carbon Report (in January 2011) which aims to provide a transparent way of reporting on and debating progress being made to reduce carbon emissions from the Council's operations and from the borough as a whole. The report can be viewed at www.haringey.gov.uk.

From 2012, the annual report will include carbon budgets, enabling Haringey to develop an understanding of its carbon usage and management.

Haringey 40:20 initiative

In order to achieve Haringey's ambitious CO2 reduction targets will require the support and action by local businesses, third sector organisations, community groups and individual residents. Haringey's 40:20 initiative has been set up to bring together those living and working in the borough and develop the vision for 40:20. Further details are available on www.haringey.gov.uk .

Sustainable Transport measures to achieve 40:20

To assist with achieving the CO2 reductions required by 2020 the Council commissioned a study (in spring 2011) to analysis the impact of this LIP's delivery programme of interventions and polices for reducing CO2 emissions from transport in the borough by 2020.

The final report will be completed in July 2011 and will provide:

- Impact assessment of LIP schemes and policies on total CO₂ emissions by 2020.
- Recommendations on priority CO₂ reduction measures for the borough to achieve reductions targets.
- Recommendations on most cost effective measures for delivering CO₂ reductions.

Muswell Hill Low Carbon zone:

In September 2009 the Mayor of London announced that Muswell Hill would become one of 10 Low Carbon Zones in London. This is a community led initiative to test different measures to reduce carbon emissions, including promoting sustainable lifestyles and choices to residents and businesses. The project is funded through two external grants, and is a partnership between Haringey Council, local community groups and other stakeholders. The short-term aim of the Low Carbon Zones project is to achieve a 20.12% reduction in carbon emissions within the Muswell Hill zone by 2012. This project will help towards the Mayor of London's target of a 60% cut in carbon. We will be using the Muswell Hill Low Carbon Zone to pilot a different approach to personalised travel planning. For this project, the work with households, schools and businesses will cover behaviour change across a range of carbon reduction issues including, waste, energy and travel.

Haringey Low Carbon Zone

The Low Carbon Zone is piloting a number of approaches to reduce carbon emissions. Those relating to transport include, a Personal Carbon Trading Scheme offering financial incentives for carbon savings achieved by residents, Cyclehoops cycle parking which is designed to reduce street clutter, a joint school travel plan bringing together a number of schools in the area, promotion of sustainable transport measures working with residents and environmental audits for businesses. Table 3.5 summarises these measures and estimated CO₂ savings. A succession plan for the future delivering of the Low Carbon Zone, beyond 2012 will be developed in late 2011. Total CO₂ emissions from the domestic sector are estimated to be 1330 tonnes per annum.

Table 3.5: Estimated CO₂ savings

Measure	Take up of measure (No of people)	CO₂ savings (tpa)
Switch to electric car	20	26.49
Switch to street car	20	24
Switch to cycling/walking and public transport	5	5
School Travel Plans	5	5
Learning eco driving	25	7.5
Total	67 tonnes per annum (1% of target saving for area)	

3.3.18

Protecting and enhancing Haringey's natural, historic and built environment

There are several proposals contained within this LIP which will contribute to protecting and enhancing Haringey's biodiversity, townscape and built heritage. These include

policies and interventions aimed at lowering traffic volumes, reducing through traffic, easing congestion, reducing car ownership and encouraging a modal shift to sustainable transport. The positive effects of these schemes include air quality improvements, a reduction in traffic congestion, noise pollution and vibration. The Council's tree planting and maintenance programme provides a vital 'green lung' for improving air quality, and for maintaining biodiversity by providing wildlife habitats and wildlife corridors between the boroughs green spaces. Street tree planting also adds aesthetic value to the borough's streetscape.

The Wood Green Town Centre major scheme will ensure the High Street's historic build environment is preserved and enhanced through improvements to the public realm, including tree planting, seating and lighting. Freight Quality Partnerships (FQP) have the potential to mitigate the negative environmental impact of freight transport in the borough and this will be considered as part of Wood Green town centre major scheme.

The development of work place travel plans will encourage business fleets to convert to greener fuels. The expansion of the car club scheme will encourage lower car usage and lower ownership and the electric vehicle charging point infrastructure will facilitate the take up of electric and hybrid fuelled vehicles.

The implementation of the greenways cycle and pedestrian routes involves the completion of ecological studies and the creation of bio-diversity action plans, to provide habitats designated for invertebrates and wetland flora and fauna.

The Strategic Environmental Assessment (SEA) recommendations for implementing the LIP delivery plan (detailed in Section 3.11 Appendix B), ensure consideration has been given to protecting Haringey's natural, historic and built environment.

3.3.19 Minimising the adverse effects of climate change on the transport network

The majority of interventions detailed in this LIP will contribute to reducing CO2 emissions from travel and as such contribute to minimising global warming and the impact of climate change.

The Mayor's Transport Strategy requires boroughs to improve the resilience of the transport network to the impacts of climate change. The most likely impacts of climate change in Haringey include hotter summers, wetter winters, periods of prolonged drought and flooding, and more extreme storm and temperature ranges. The areas of Haringey's transport network which are most likely to suffer these climate changes are:

Hotter summers will cause discomfort for public transport passengers, especially on the underground, overland rail services and bus fleets which do not have climate control systems on board.

Hotter summers will also exacerbate the effects of poor air quality from transport emissions.

More extreme periods of cold, icy weather will put severe strain on winter gritting services and will increase road and footway maintenance demands.

More frequent incidents of flooding from wetter winters and more intense summer downpours will affect parts of the highway network due to drainage capacity limits.

All transport projects in Haringey will be designed with resilience to severe weather events expected as a result of climate change.

The Council will conduct a comprehensive risk assessment to determine transport assets, networks and management systems that are vulnerable to the effects of climate change. The Council will use this and other information to develop a Climate Change Adaptation Strategy and a Surface Water Management Plan.

The Council will implement the following measures to improve the resilience of the transport network to climate change:

- Lobby TfL and regional train operators to provide climate control systems in their train fleet.
- Maintain emergency response capacity to deal with extremes of weather eg. grit stock piles and pothole repairs.
- Implement the surface water management plan and work with Thames water (and TfL) to improve drainage in locations where flooding could be a significant risk. Consider opportunities to incorporate sustainable urban drainage systems.
- Deliver a net increase in street trees and explore opportunities for greening the streetscape in all suitable transport projects. Drought resident species will be considered for future planting projects.

3.3.20 Maintenance programme

The Council is responsible for the planned and reactive maintenance of highways, footways, highway structures, streetlighting and drainage.

3.3.21 Highways Asset Management Plan

Haringey's Highways Asset Management Plan was produced in 2007 to develop a strategic approach to managing these vital assets. It seeks to develop knowledge and understanding of the network in terms of what is owned, condition and treatment options. This enables longer term programming of work and a better understanding of funding needs over time.

The highways network in Haringey comprises 314km of roads and 108km of footways. On top of this are assets including street lighting, bridges, drainage, signs, street furniture, car parks, trees and amenity areas, the combined value of which extends into many millions of pounds.

3.3.22 Highways assets maintenance

Maintenance of the borough's highways assets, including roads, footways, drainage, and streetlights are essential for delivering the goals of the MTS, the Council's Sustainable Community Strategy goals and the LIP objectives.

3.3.23 Principal road maintenance:

Investment in the principal road network contributes to LIP objectives 4 and 9. The Council uses results of annual road condition surveys, (compiled from detailed visual inspection data collected by Hammersmith & Fulham Council) to determine which sections of principal and non principal roads are to be included in the annual works programme for carriageway reconstruction/ resurfacing treatment.

In order to assist with the provision of bus stop accessibility, the borough will ensure a kerb height of at least 100mm is maintained within the vicinity of bus stop locations for

all road carriage resurfacing and/or reconstruction works carried out through the road maintenance programme.

Funding for Principal Road reconstruction is provided by TfL. £380k is allocated for 2011/12 as detailed in table 3.6. There is a LIP mandatory target relating to the standard of the principal road network (see Chapter 4.2).

Table 3.6: Principal Roads – Funded projects - 2011/12

Road Name	Ward	Estimated Cost (£k)
A103 Tottenham Lane from Rokesly Avenue to Elmfield Avenue	Hornsey	137
A504 Muswell Hill Broadway between Colney Hatch Lane and Fortis Green	Muswell Hill	243
SUB-TOTAL		380

3.3.24 Non principal (local) roads and footways:

The Council will invest approximately £1.3million per year for the three year period 2011-12 to 2013/14 for resurfacing and repairing the borough's local roads and footways.

Priority is being given in 2011/12 to the treatment of roads that have deteriorated as a result of the recent cold weather. Table 3.7 details the roads to be treated. Future needs will need to be reviewed as part of the Council's annual Sustainable Transport Asset Management Plan.

Table 3.7 Local (classified & unclassified) road treatment priority for 2011/12

Road Name	Ward	Estimated Cost (£k)
Alexandra Park Road, N10/N22	Alexandra	134
Perth Road, N22	White Hart Lane	75
Bishopswood Road, N6	Highgate	61
Bloomfield Road, N6	Highgate	38
Holmesdale Road, N6	Highgate	12
Elder Avenue, N8	Crouch End	60
Connaught Gardens, N10	Muswell Hill	23
Stanhope Gardens, N4	St Ann's	66
Gedeney Road, N17	White Hart Lane	27
Park View Road, N17	Tottenham Hale	35
Hartham Road, N17	Bruce Grove	20
Holmesdale Terrace, N15	Seven Sisters	9
St Loys Road, N17	Bruce Grove	19

Woodside Road, N22	Woodside	102
Gladstone Avenue	Noel Park	126
Stanmore Road, N15	West Green	72
SUB-TOTAL		879

3.3.25 Footways :

Investment in the maintenance of the borough footways are essential for improving the walking environment by maintaining and improving the quality of pavement surfaces and small scale redial treatments to remove the risk of potential trip hazards. Our condition surveys show that there are a greater percentage of footways (27%) needing maintenance than the borough roads. It is therefore proposed to allocate £395,000 of the Council investment to deal with those footways in need of urgent repairs.

The priority in 2011/12 is to continue to maintain the footways in need of urgent repairs, following the effects of the severe winter weather. Table 3.8 details how £395k of Council investment will be invested on footways in 2011/12

Table 3.8: Footway Network – Priority List for 2011/12

Road Name	Ward	Estimated Cost (£k)
Wightman Road, N8	Harringay	7
Onslow Gardens, N10	Muswell Hill	24
Hurst Green, N6	Crouch End	41
Dukes Avenue, N10	Fortis Green	55
Rokesly Avenue, N8	Hornsey	24
White Hart Lane, N22	Woodside	32
Park Avenue, N22	Woodside	36
Gladstone Avenue, N22	Noel Park	28
Tower Gardens Road, N17	White Hart Lane	40
Awlfield Avenue, N17	White Hart Lane	43
Flexmere Road, N17	White Hart Lane	16
Newsam Avenue, N15	St Ann's	22
Antill Road, N15	Tottenham Hale	27
Total to date		395

3.3.26 Highway Bridges and Structures:

The Council has a programme of assessment and strengthening for all bridge structures that come under the Council's remit. Bridges funding is based on assessment and will be used for design work and planned maintenance with the aim of arresting structural deterioration. Funding required over the 3 year period 2011/12 to 2013/14 is as follows.

2011/12 = £162k
 2012/13 = £1,769,000
 2013/14 = £395,000

For 2011/12, the £162K LIP funding has been allocated for highway bridge assessment and design work, as detailed in table 3.9.

Table 3.9: Bridges Investment for 2011/12

Bridge Name	Ward	Estimated cost (£k)
Wightman Road – strengthening design only	Harringay	100
Finsbury Park over New River – assessment	Harringay	15
Ferry Lane over Pymmes Brook – assessment	Tottenham Hale	15
Station Road over New River – assessment	Woodside	12
Woodside Avenue over Railway – assessment	Fortis Green	20
Allocated Budget - £162k		

3.3.27 Street Lighting

The Council is nine years into a major lighting column replacement programme. This makes a major contribution to the improved night time environment, makes residents feel safer and helps reduce crime and the fear of crime. Street lighting is also implemented to improve road safety. To date 48% of our streetlights have been renewed and 25% were already in a good condition. This leaves 27% still to be replaced or 4,400 columns. We are investing a further £800,000 per year between 2011/12 and 2013/14 for the street lighting renewal programme. Table 3.10 provides the street lighting renewal area proposed for 2011/12.

Table 3.10: Street Lighting proposed renewal areas 2011/12

AREA	WARD	VALUE (£k)
North Hill/Great North Road, N6	Highgate	48
Tynemouth Road, N17	Tottenham Green	140
St Ann's ward	St Ann's	135

AREA	WARD	VALUE (£k)
Bruce Grove ward	Bruce Grove	165
Alexandra ward	Alexandra	145
Stuart Crescent, N22	Woodside	22
Bishopswood Road, N6	Highgate	23
Downhills Park Road, N17 [part]	West Green	22
Hampstead Lane, N6 [part]	Highgate	100
		800

3.3.28

Local Transport Fund

In line with every other London borough TfL have allocated £100,000 to the Council to develop local transport projects for 2011/12. We will use some of the funding to extend Haringey's Community Transport scheme, continue implementation of the Bus Stop Accessibility Programme, and deliver small scale road safety projects.

3.4

Delivery Plan - Programme of Investment

This section summaries the programme of schemes, initiatives, and complementary measures which will contribute to the delivery of Haringey's transport objectives between 2011/12 and 2013/14 and beyond.

In accordance with LIP development guidance, the delivery programme of interventions is presented under the 3 TfL funding programme categories:
Corridors/Neighbourhoods/Supporting Measures, Major Schemes, and Maintenance.

Table 3.11 details the Programme of Investment for the Delivery Plan for the period 2011-2014. This sets out the LIP funding requirements for the schemes contained within the following section (3.3.1), and identifies which of the borough objectives and MTS goals each scheme is intended to delivery.

Table 3.11: Haringey's Proposed Programme of Investment 2011/12 – 2013/14

Programme areas		Funding source	Funding (£,000s)				MTS goals					Expected main MTS outcomes (See Key Below)	LIP objectives (See Key Below)
			2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change		
Corridors and Neighbourhoods	Green Lanes Corridor, Harringay and St Ann's Neighbourhood	LIP allocation	150	586	500	1,236	✓	✓	✓	✓	✓	1, 2, 4, 5, 9, 10, 11, 12, 14, 16, 17, 18, 20, 21, 22, 23	1, 2, 3, 4, 5, 6, 7, 9, 11
	Tottenham gyratory complementary measures for 20 mph zone in residential roads off Broad Lane & south of Broad lane [Tottenham Hale + Tottenham Green neighbourhoods]	LIP allocation	0	30	160	190	✓	✓	✓	✓	✓	1, 2, 3, 4, 5, 7, 9, 10, 11, 12, 16, 17, 20, 21	1, 2, 3, 5, 9, 11
	Wood Green High Road from north of station to borough boundary [completion of 2010/11 scheme]	LIP allocation	100	0	0	100	✓	✓	✓	✓	✓	10, 12, 16, 17, 18	1, 2, 3, 5, 6, 7, 8, 9, 11
	North Tottenham neighbourhood [linked to proposed Spurs development]	Developer/ Section 106/278	360	619	127	1,106	✓	✓	✓	✓	✓	1, 9, 10, 16, 26	1, 2, 3, 6, 7, 9, 11
	Local safety scheme programme*	LIP allocation	200	200	200	600	✓	✓	✓	✓	✓	16, 17, 18, 19	4, 11
	Road Safety programme*	Council revenue	100	200	200	600	✓	✓	✓	✓	✓	16,17,18,19	4, 11
	DIY Streets/20mph zone - Langham Road area	LIP allocation	400	0	0	400	✓	✓	✓	✓	✓	1, 12, 16, 18, 23	2, 3, 4, 6, 7, 9, 10, 11
	DIY Streets/20 mph zone - Hornsey area	LIP allocation	75	225	100	400	✓	✓	✓	✓	✓	1, 12, 16, 18, 23	2, 3, 4, 6, 7, 9, 10, 11
	DIY Streets/20 mph zone – Warwick Gardens	LIP allocation	0	0	90	90	✓	✓	✓	✓	✓	1, 12, 16, 18, 23	2, 3, 4, 6, 7, 9, 10, 11
	Greenways cycling & pedestrian routes	LIP allocation	100	0	0	100	✓	✓	✓	✓	✓	1, 16, 23	1, 2, 3, 5, 6, 7, 9, 10, 11
	Implementation of central section of Link 4 between Wood Vale and Alexandra Palace	LIP allocation	200	100	0	300	✓	✓	✓	✓	✓	1, 16, 23	1, 2, 3, 5, 6, 7, 9
	Link 78	LIP allocation	0	100	0	100	✓	✓	✓	✓	✓	1, 12, 16, 18, 20, 21, 23	1, 2, 3, 5, 6, 7, 9
	Biking Borough – Cycle hub in Wood Green	LIP allocation	156	147	147	450	✓	✓	✓	✓	✓	1, 9, 10, 16, 17, 26	1, 2, 3, 5, 6, 7, 9, 11
	Biking Borough Strategy delivery -	TfL Non LIP	61.5	205	54	320.5	✓	✓	✓	✓	✓	1, 9, 10, 16, 17, 26	1, 2, 3, 5, 6, 7, 9, 11
	Cycle training*	LIP allocation	100	100	110	310	✓	✓	✓	✓	✓	1, 10, 16, 18	1, 2, 3, 4, 6, 7

	Electric charging points	LIP allocation	20	20	20	60		✓		✓	1, 14, 23	2, 6, 7,	
	Car club expansion	TfL Non LIP	20	30		50						2, 6, 7,	
	Cycle parking [estate and on street]	LIP allocation	23	21	21	65				✓	10, 16, 17, 23	2, 3, 6, 7, 9	
	Street Lighting enhancements - borough wide*	Council revenue	800	800	800	2,400		✓	✓	✓	7,12,16,17,	3,8,9,	
	Parking Plan	Council revenue	600	600	600	1,800		✓	✓	✓	4,10,	2,5,6,7	
	Cycle enhancements	Developer/ Section 106/278	171	0	0	171		✓	✓	✓	1,16,23	1,2,3,5,6,7,9	
	Tree planting programme	Council revenue	30	30	30	90		✓		✓	12, 13, 23	6, 7, 10, 11	
	Air Quality strategy	Defra AQ grant.	30	30	30	90		✓		✓	13, 23	6, 7, 10,11	
	Pedestrian enhancements	Developer/ Section 106/278	750	399	115	1,264		✓	✓	✓	1,16,23	1,2,3,5,6,7,9, 11	
Supporting Measures / Smarter Travel Projects													
	Sub regional workplace travel planning	LIP allocation	25	25	25	75		✓	✓		✓	1, 9, 10, 13, 14, 16, 17, 23, 27	2, 3, 6, 7, 10, 11
	Smarter Travel website	LIP allocation	5	5	5	15		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8
	Marketing campaign	LIP allocation	70	70	70	210		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8, 11
	Setting up Neighbourhood champions	LIP allocation	5	5	5	15		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8
	Launch event for smarter travel initiatives	LIP allocation	20	20	0	40		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8
	Greenways complementary measures (Link 04)	LIP allocation	25	0	0	25		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8, 10, 11
	Supporting measures for Cycle Hubs	LIP allocation	50	83	83	216		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8, 11
	Town centre and retail areas travel planning	LIP allocation	50	50	60	160		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8, 10, 11
	Publicity and marketing measures for schools	LIP allocation	50	100	104	254		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8
	Road safety interventions in schools	LIP allocation	50	50	60	160		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8
	Festival roadshows	LIP allocation	40	40	60	140		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8
	Walk and cycle reward incentives	LIP allocation	40	40	50	130		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8
	Child Road Safety Project	LIP allocation	20	20	20	60		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8
	Smarter travel staff resource	LIP allocation	83	90	90	263		✓	✓		✓	1, 14, 16, 17, 18, 19, 23, 27	1, 2, 3, 4, 6, 7, 8

	Shopmobility/Community Accessibility scheme/ Bus Stop Accessibility	LIP allocation	40	40	40	120	✓	✓	✓	✓	2, 20, 21	1,5
	Local transport projects (inc. Bus Stop Accessibility)	LIP allocation	100	100	100	300	✓	✓	✓	✓	1, 9, 10, 14, 16, 20, 23, 27	2, 3, 5,6, 7, 11
Integrated transport total			5,119.5	5,180	4,076	14,375.5						
Maintenance	Principal Road maintenance*	LIP allocation	380	493	472	1,345	✓	✓	✓	✓	6, 7, 10, 15, 18, 24, 26	4, 9
	Borough Road + footway maintenance - borough wide	Council revenue	1,300	1,300	1,300	3,900	✓	✓	✓	✓	6, 7, 10, 15, 18, 24, 26	4, 9, 11
	Bridges*	LIP allocation	166	1,989	1,304	3,459	✓	✓	✓	✓	6, 7, 10, 15, 18, 24, 26	4, 9, 11
Maintenance total			1,846	3,782	3,076	8,704						
Major Schemes	Major Scheme - Wood Green High Road	LIP allocation	100	1,800	1,956	3,856	✓	✓	✓	✓	1, 2, 4, 5, 7, 9, 10, 12, 18, 20, 21, 22, 24	2, 3, 5, 8, 9, 10, 11
Major Scheme total			100	1,800	1,956	3,856						

Key for table 3.11

List of MTS outcomes	
1. Balancing capacity and demand for travel through increasing public transport capacity and/or reducing the need to travel	15. Improving perceptions and reducing impacts of noise
2. Improving people's access to jobs	16. Facilitating an increase in walking and cycling
3. Improving access to commercial markets for freight movements and business travel, supporting the needs of business to grow	17. Reducing crime rates (and improving perceptions of personal safety and security)
4. Smoothing traffic flow (managing delay, improving journey time reliability and resilience)	18. Reducing the numbers of road traffic casualties
5. Improving public transport reliability	19. Reducing casualties on public transport networks
6. Reducing operating costs	20. Improving the physical accessibility of the transport system
7. Bringing and maintaining all assets to a state of good repair	21. Improving access to services
8. Enhancing the use of the Thames for people and goods	22. Supporting wider regeneration
9. Improving public transport customer satisfaction	23. Reducing CO2 emissions from ground-based transport, contributing to a London-wide 60 per cent reduction by 2025
10. Improving road user satisfaction (drivers, pedestrians, cyclists)	24. Maintaining the reliability of transport networks
11. Reducing public transport crowding	25. Supporting regeneration and convergence of social and economic outcomes between the five Olympic boroughs and the rest of London
12. Enhancing streetscapes, improving the perception of the urban realm and developing 'better streets' initiatives	26. Physical transport legacy
13. Protecting and enhancing the natural environment	27. Behavioural transport legacy
14. Reducing air pollutant emissions from ground-based transport, contributing to EU air quality targets	
List of LIP objectives:	

1. Reduce Haringey's deprivation and health inequalities by improving access for all to essential services, including health, education, employment, social and leisure facilities across the borough.	7. Reduce Haringey's CO2 emissions from transport by 40% by 2020 through smarter travel measures to reduce car use and encouraging the use of zero or low carbon transport alternatives.
2. Ensure Haringey's transport network can accommodate increases in travel demand by tackling congestion, increasing sustainable transport capacity, encouraging modal shift and reducing the need to travel.	8. Reduce crime, the fear of crime and anti-social behaviour on all modes of transport and in the public realm in Haringey.
3. Facilitate an increase in walking and cycling to improve the health and wellbeing of Haringey's residents.	9. Improve the condition and legibility of principal roads, cycle paths and footways within the borough, having regard to the public realm, and increase satisfaction with the condition of the network.
4. Reduce the number of people killed and seriously injured on Haringey's transport network and reduce the number of casualties among vulnerable road users.	10. Ensure that transport protects and enhances Haringey's natural and historic environment including biodiversity, geodiversity, landscape, townscape, cultural heritage, water resources and land.
5. Increase transport access and connectivity to and from Haringey's key employment and regeneration areas, including Wood Green town centre, and the growth areas of Haringey Heartlands and Tottenham Hale.	11. Minimise the effects of unpredictable events arising from climate change on the transport network.
6. Improve air quality within the borough through initiatives to reduce and mitigate the effects of pollutant emissions from road and diesel operated rail transport.	

The specific schemes set out in the Programme of Investment (table 3.11) will be delivered by April 2014 unless they are ongoing measures. The schemes marked with an asterisk (*) are those considered to be ongoing for the foreseeable future.

This delivery plan will be refreshed every three years, the next time by April 2014. The types of interventions detailed in Chapter 3 will be delivered over the 20 year period 2011-2031.

Appendix G summaries which of the borough and MTS transport challenges and objectives are addressed by the delivery programme of interventions.

3.5

Identification of Corridors / Neighbourhoods and Supporting Measures programme

The programme consists of developing holistic schemes that address issues relating to the smoothing of traffic flow, bus reliability, local safety, cycling, walking and the public realm and the development of supporting measures such as smarter travel to complement physical measures.

Identification of corridors are based on the A road network in the borough excluding TLRN routes as these roads are likely to present the greatest problems in terms of congestion and traffic flow. Other roads such as B roads are addressed through Neighbourhood funding. Appendix D provides a map of the corridors identified in Haringey.

The neighbourhoods programme consists of schemes which deliver local area improvements including CPZs, 20mph zones, accessibility and the reduction of street clutter, environmental schemes including air quality improvements, the expansion of the car club network and increasing the number of electric charging points.

Appendix E provides a map of the defined neighbourhoods in Haringey for the purpose of prioritising LIP funding. These neighbourhoods are identified as the areas bordered by the borough's main road network or ward boundaries.

In order to effectively prioritise how the LIP funding should be allocated, the Council developed an objective methodology for prioritising the corridors and neighbourhoods programme. This was introduced to prioritise the LIP funding programme from 2010/11 and has been used to development of the LIP delivery plan for the 3 year period from 2011/12-2014. Appendix F details the prioritisation criteria and the results of this process.

The priorities for Neighbourhoods are based on four key criteria:

- The introduction of a 20mph speed limit or zones to all residential areas and some 'B' roads.
- Using school travel plans to develop proposals for integrated engineering and travel awareness work in school catchment areas where either i) the schools have a high car modal share and/or ii) the schools have achieved or aiming to achieve accreditation for their school travel plans.
- Removal of street clutter as part of all schemes [a "Better Streets" approach]
- Expansion of the borough's network of on and off street electric vehicle charging points.

The smarter travel programme involves behaviour change initiatives including the development of travel plans for schools, hospitals and businesses, travel awareness initiatives which integrate with corridor / neighbourhood programmes and the road safety education programme to reduce accidents.

The smarter travel programmes will focus on community work and personalised travel planning measures including promoting sustainable or carbon efficient private car use. The work will also complement the Neighbourhoods/Corridors programme to maximise the potential for modal shift arising from these programmes. Partnership working with the NHS will be undertaken as it recognised sustainable transport is part of public health promotion. Behavioural change programmes will complement the physical measures planned as part of the Biking Borough strategy. Measures planned include marketing and promotional campaigns and cycling specific personalised travel planning. Similarly

behavioural measures would complement the two Cycle Superhighways planned for Haringey.

As Corridors/Neighbourhoods/Supporting measures have been combined into a single programme, the approach to developing the LIP programme of proposals has looked at:

- a) The issues identified for each priority corridor or neighbourhood that need to be addressed to meet the both the borough's and the MTS objectives, challenges and key outcomes.
- b) An approach which addresses all aspects of behaviour change, including enabling, engaging, encouraging and leading by example.
- c) Where possible, incorporating LIP funded schemes with the Council's capital investment for roads, pavements, street lighting, road safety and parking schemes.

Neighbourhoods & Corridors programme 2011-2014

For 2011-2014, the Council's identified priorities for the Corridors and Neighbourhoods programme are:

1. Wood Green High Road, Green Lanes corridor and the adjoining residential neighbourhoods of Hornsey Park and St. Ann's.
2. Tottenham Hale and Tottenham Green neighbourhoods as part of the Tottenham Hale Gyratory complementary measures
3. North Tottenham neighbourhood and corridors.

Wood Green High Road and the Haringay Green Lanes corridors have been identified as one of the key corridors in London for accommodating the growth in travel over the next twenty years. It therefore needs to perform a strategic role in terms of sustainably moving people through the borough, as well as supporting Wood Green and Green Lanes shopping centres.

The principles of TfL's 'Better Streets' initiatives will be applied to improve the accessibility, function and quality of Haringey's town centre corridors and adjacent neighbourhoods, while maintaining the character of the areas built and historic environment.

3.5.1 Green Lanes Corridor, Haringay and St Ann's Neighbourhood

For Green Lanes between Turnpike Lane and the Borough boundary with LB Hackney and the adjoining areas our aims are to develop a scheme to balance the need for traffic movement with local issues of congestion, parking provision, road safety, urban realm, cycle accessibility and bus service reliability.

The following measures are planned to be delivered:

- Removal of street clutter, including unnecessary road markings, signs, guard railing and bollards.
- Relocate and merge functions, such as locating signage on lamp columns.
- Improve walking and cycle accessibility, and secure cycle parking to and from town centres and the public transport network.
- Improved layout and design of the streets, reducing carriageway width for provision of more generous pavement space for pedestrians.
- Improve bus service reliability

- Footway and carriageway accessibility improvements, incorporating bus stop accessibility.
- Street lighting improvements and CCTV positioning (for dual use for traffic management and public realm safety coverage) will be incorporated into the design of the public realm and pedestrian links to design out potential crime hotspots and reduce the perceived fear of crime.

This is a major project with expected completion in 2014 and would complement a Major Scheme funding submission to TfL, detailed in section 3.5. The section of Green Lanes to the north of Wood Green would focus on safety and accessibility works, de-cluttering and cycle facilities.

3.5.2 Tottenham Hale Gyratory Scheme complementary measures

During 2011/12, design works and consultation will commence on complementary measures for the gyratory works for Monument Way and Broad Lane, including 20 mph zones for the residential neighbourhoods adjacent to Broad Lane, plus cycling, pedestrian and public transport accessibility improvements to Tottenham Hale transport interchange. Advance works have already been completed.

The Gyratory scheme will include the reversion of the current one way traffic movement to allow two-way traffic flow and a 20mph speed limit along Monument Way and Broad Lane. Plans also include the construction of a new larger bus station and interchange and improvements to the principal roads and pedestrian areas. Additionally, funds will also be allocated towards carriageway resurfacing at Ferry Lane and Watermead Way.

The estimated cost of the scheme is £35.5m. Funding for the scheme has been secured from a number of sources including TfL, Community Infrastructure Fund [CIF], and the Growth Area Fund [GAF] allocations. The Tottenham Gyratory works and new bus station are estimated to cost £16.5m. Funding for these two aspects of the project have been secured from TfL, who will carry out the works. It is intended that the design and consultation phase will commence in the financial year 2011/12, with implementation expected to take place during 2012/13 to 2013/14.

Additional funding through Section 106 will be obtained from developments in the Tottenham Hale area including from the Hale Village development currently under construction.

LIP funding has been allocated towards implementing a complementary 20mph zone, pedestrian, cycling and public transport accessibility improvements for the residential areas adjacent to Broad Lane. This scheme will contribute towards the Council's aim to improve road safety, encourage walking, cycling and public transport accessibility by reducing traffic speeds and improving traffic movement within the Tottenham Hale area, and supports the regenerate of the entire Tottenham High Road corridor.

3.5.3 North Tottenham corridor and neighbourhood

Between 2011 and 2015 significant enhancements are expected arising from the redevelopment of Spurs football ground and associated development. Measures will focus on accessibility improvements to the public transport network including bus priority measures and for cyclists and pedestrians, including legible London signage, extension of the existing CPZ and improvements to personal security through crime reduction measures. Local deprivation and health inequalities will be tackled through

provision of improved accessibility to the transport network, including improved orbital bus connections, and to local employment opportunities which will be created through the regeneration of the Tottenham High Road corridor and surrounding neighbourhoods. Healthier lifestyles will be encouraged through walking and cycling as a recreational activity as well as a sustainable mode of travel.

3.5.4 Seven Sisters neighbourhood

The Seven Sisters neighbourhood will be prioritised for scheme implementation from 2014/15, incorporating the Better Streets principal to improve sustainable transport accessibility to the urban realm, including footway and personal security enhancements and additional traffic management measures to improve road safety. A key objective of this scheme will be to reduce deprivation and associated health inequalities by improving accessibility to employment opportunities, education and health facilities through improved public transport connectivity, reduction in the risk and fear of street crime and through promoting walking and cycling as a healthy lifestyle choice.

3.6 Major Schemes: Wood Green Town Centre

£100k LIP funding has been allocated in 2011/12 for the development and consultation of an integrated set of proposals for the Wood Green town centre to improve pedestrian and cycling accessibility, enhance public realm, and address traffic congestion, road safety, traffic management, bus service reliability, parking and loading issues. Implementation is proposed for 2013-2014.

Based on “Better Streets” approach, the ‘Major Scheme’ proposal for Wood Green town centre is focused on delivering the following town centre public realm objectives:

1. to improve the public realm throughout the town centre based on the Better Streets approach
2. to improve the pedestrian environment in and around the town centre through measures such as footway resurfacing and signage
3. to improve access to public transport
4. to reduce road user casualties in and around the town centre
5. to reduce the negative impact of vehicular traffic
6. to support sustainable transport through car club bays and electric charging points
7. to enhance cycle routes and facilities into and through the town centre
8. to improve reliability of bus services into and through the town centre
9. to improve accessibility into and within the town centre
10. to improve personal security in and around the town centre
11. to improve linkages between the town centre and Haringey Heartlands
12. to promote a sustainable future for the town centre including increasing the range and quantity of retail and employment choices and improving retail, leisure and community facilities

The major scheme proposal will complement the recently completed station access programme including the diagonal crossing outside Wood Green tube station. TfL funded a pilot project, undertaken by consultants, looking at three outer London town centres including Wood Green with the aim of delivering urban realm proposals, develop a framework for delivering the Mayor's Better Streets urban realm interventions and identifying a programme of proposals. This work informed our proposals for Wood Green town centre. Our initial plans for the town centre include:

- reducing street clutter
- renewing footway paving
- investigating the potential for diagonal crossing outside Turnpike Lane tube station
- improved public realm eg tree planting, seating and lighting
- replacing the existing bus shelters
- infilling bus laybys
- revise entry treatment at Gladstone Avenue/Buller Road junction
- redesign of Turnpike Lane bus and tube station environment

The scheme is estimated to cost £3.856m with the split of expenditure as below:

2011/12	£100,000
2012/13	£1,800,000
2013/14	£1,956,000

Scheme completion is planned for 2014.

No further major schemes have been identified at present. However, future town centre schemes may be developed over the lifetime of this LIP.

3.7 Delivery of the MTS 'high profile outputs'

Table 3.12 details how the schemes and initiatives identified in this delivery plan will contribute towards delivering the following 'high profile outputs' identified in the MTS

- Cycle Superhighway schemes
- Cycle parking
- Electric vehicle charging points
- Better Streets
- Cleaner local authority fleets
- Streets

Table 3.12. Delivery of high profile outputs.

LIP Delivery Plan Schemes	Cycle Superhighway schemes	Cycle parking	Electric vehicle charging points	Better Streets	Cleaner local authority fleets	Street trees
Green Lanes Corridor, Harringay and St Ann's Neighbourhood.		✓	✓	✓	✓	
Tottenham gyratory complementary measures [Tottenham Hale neighbourhood + Tottenham Green neighbourhood inc. Town Hall Approach Rd/Tottenham Green].	✓	✓		✓		✓
Wood Green High Road from north of station to borough boundary [completion of 2010/11 scheme]		✓	✓	✓		
Seven Sisters Neighbourhood		✓		✓		
North Tottenham neighbourhood [linked to proposed Spurs development]		✓		✓		
Local safety scheme programme	✓			✓		
DIY Streets - Langham Road area		✓	✓	✓		✓
DIY Streets - Hornsey area			✓	✓		
DIY Streets - Noel Park Estate			✓	✓		
Greenways cycling & pedestrian routes	✓	✓				
London Cycle Network	✓	✓		✓		
TfL Cycling Superhighway Scheme	✓	✓				
Biking Borough – Cycle hub in Wood Green		✓		✓		
Cycling training	✓			✓		
Electric charging points			✓			
Cycle parking [estate and on street]		✓				
Street Lighting enhancements - borough wide				✓		
Smarter Travel programme / Behavioural change measures	✓		✓	✓		
Sub regional workplace travel planning	✓	✓	✓		✓	
Travel awareness	✓		✓	✓		
Shopmobility/Accessibility scheme				✓		
Local transport projects				✓		
Street Tree programme				✓		✓
Borough Road maintenance - borough wide				✓		
Haringey's Air Quality action plan				✓		✓
Bridges				✓		

3.8 Public Transport

Although the Council can develop and implement transport projects and programmes to support the MTS objectives and its own LIP objectives, it has no direct control over the public transport system in the Borough. Its key role is to lobby and support improvements to quality of service, capacity enhancements, new routes etc the transport operators: TfL, train operating companies and Network Rail.

Rail / Underground improvements

TfL Underground plays a vital role in the accessibility of Haringey and the network requires continuous renewal to ensure that reliability does not deteriorate. The Council will continue to support TfL in delivering committed infrastructure improvements to increase the capacity and reliability of the public transport network and the Council will continue to lobby for a commitment to progress currently unfunded proposals to enhance the networks ability to address current and future travel demands.

TfL Business Plan identifies investment on the Victoria, Piccadilly and Northern lines generating between 19% and 25% increase in capacity by 2015.

The Council supports TfL work in developing rail capacity enhancements for the period 2014 to 2019. We consider enhanced capacity on the West Anglia main line a key priority as well as electrification and train lengthening on the Barking-Gospel Oak line and additional services on the Great Northern line through Alexandra Palace to Moorgate/Kings Cross. The Council will continue to work with the North London Strategic Alliance in support of the electrification of the Barking-Gospel Oak line and for further passenger service improvements.

The Council would like to work with Network Rail, train operating companies and TfL to develop travel plans for main line and underground stations in Haringey. Further details are provided in the Smarter Travel section above.

Bus network enhancements – including orbital bus network

The Council will continue to lobby TfL to enhance public transport connectivity, particularly for the orbital bus route network across the borough, which is essential to improve accessibility to new employment opportunities from the Borough's town centres and the main public transport interchanges. The Council will continue to work with TfL to ensure bus services are reliable, accessible and meet the needs of those who live and work in Haringey. This work would include bus priority measures and to ensure bus service speed and reliability is considered as part of our corridors and neighbourhood proposals. The Council will ensure Councillors and users of bus services are fully consulted in regarding TfL's ongoing bus service review consultations. Lobbying will continue, on behalf of all Haringey bus users for improvements to bus service frequencies, journey times and reliability on the Borough's increasingly crowded bus network.

3.9 Risk Management

Haringey Council recognises the importance of having adequate risk management measures in place to ensure that all schemes, particularly those with a high priority are implemented in the event that any significant issues arise.

The Council will therefore assess schemes and identify risks to individual schemes by reviewing them at monthly scheme implementation meetings. This will ensure that the potential risks outlined in Table 3.13 are taken into account and mitigation measures applied where necessary. Any intervention required will be recorded and closely monitored throughout the duration of the scheme.

It is anticipated that the above course of action will highlight any areas of uncertainty, reduce the impacts of any possible risks and will possibly have the added benefit of identifying any potential for cost savings.

Table 3.13 Programme risks and mitigation measures

Risk	Mitigation
Loss of implementation resources	<ul style="list-style-type: none"> • Management of staff resources to ensure flexibility to meet LIP project requirements • Restriction of outsourcing of works required in connection of implementation of schemes. • Over-programming to ensure efficient use of resources if other schemes are delayed.
Compatibility with Policy	<ul style="list-style-type: none"> • Schemes agreed at early stages of LIP development to ensure that we are delivering across the full range of intended targets and outcomes • Elected members consulted on scheme prioritisation during initial stages of LIP development
Delays to progress of works	<ul style="list-style-type: none"> • Adequate implementation plans agreed to take into account all stages of scheme, including any unexpected issues, detailed design and consultation process. • In terms of consultation, the use of fast tracking consultation for non-contentious schemes can facilitate faster delivery • Undertaking early consultation with statutory undertakers. • Undertaking early liaison with the Council's legal department to ensure that any required notices and Orders are built into the programme.
Variation in costs	<ul style="list-style-type: none"> • Project costs and spend are reviewed internally on a monthly basis so that any variation can be addressed at an early stage. • Re-allocation of funds between different projects should any issues be identified, which will ensure the highest priority projects are completed, whilst staying within the overall budget.
Loss of stakeholder contributions	<ul style="list-style-type: none"> • Early consultation undertaken in advance of detailed design, so that any fundamental issues are addresses as early as possible.

3.10 Prioritisation

The prioritisation criteria for the selection of corridors/neighbourhoods /supporting measures proposals are detailed in Appendix F.

Table 3.14, displays the results of the prioritisation criteria process for identifying LIP schemes.

Table 3.14: Priority ranking for schemes.

Scheme/ Programme	Criteria for Inclusion	Complementarily between schemes/ programmes	Deliverability	Priority
Neighbourhood/ Corridor schemes	Support for regeneration; road user casualties; cycle usage; pedestrian activity; parking pressure; high car usage; urban realm			
Tottenham Hale		✓✓	✓✓	4
Bounds Green		x	✓	
Seven Sisters		x	✓✓	
St Ann's		✓✓	✓✓	
Alexandra Park		x	✓	
Tottenham Green		✓	✓✓	
North Tottenham		✓	✓	
Creighton Avenue area		x	✓	
Harringay Ladder		✓	✓✓	
Wood Green High Road/Green Lanes	Support for town centres; support for regeneration; road user casualties; cycle routes; pedestrian activity; traffic congestion; urban realm	✓✓	✓✓	2
Muswell Hill to Turnpike Lane		✓	✓	
Alexandra Park to Finsbury Park		✓	✓	
Smarter Travel	Reduced car usage; reduced CO ₂ emissions	✓✓	✓✓	1
Local safety schemes	Road user casualties	✓	✓✓	3
DIY Streets – Langham Road area	Road user casualties; urban realm; cycle usage	✓✓	✓✓	
DIY Streets – Hornsey area		✓✓	✓	
DIY Streets – Warwick Gardens		✓✓	✓✓	
DIY Streets – Noel Park estate		✓✓	✓✓	
Greenways cycle/pedestrian routes – link 4	Cycle and pedestrian activity	✓		
Local cycle routes – link 78	Cycle activity	✓		
Biking Borough – Wood Green hub	Cycle activity	✓✓		5
Cycle training	Cycle activity	✓		
Accessibility	DDA compliance	✓		
Workplace travel planning	Cycle and pedestrian activity; reduced car usage; reduced CO ₂ emissions	✓✓		

(Key for table 3.14).

Complementarily

x = none
✓ = slight
✓✓ = strong

Deliverability

✓ = potentially difficult
✓✓ = straightforward

3.11 Strategic Environmental Assessment (SEA) recommendations for implementing the LIP delivery plan (detailed in Appendix B):

The following recommendations, identified through the SEA process, will be taken into account through the implementation of schemes and measures identified in the LIP delivery plan:

- Exploit opportunities to work in conjunction with the private and voluntary sectors to maximise the benefits derived from LIP2 measures;
- Ensure that works are completed in accordance with good practice on site, e.g. a Construction Environment Management Plan, which will have beneficial effects, including helping to avoid or reduce any water pollution effects and reduce noise, vibration and light pollution;
- Ensure that any future use of the London Blue Ribbon Network for water based transport must be undertaken in a sustainable manner;
- Provide reference to the need to minimise and mitigate the risk of flooding;
- Seek to safeguard as much as possible the borough's landscape resources, character and quality;
- Periodically review the role which traffic and demand management measures assume in promoting both a modal shift towards public transport as part of the wider package of measures aimed at tackling the carbon footprint of transport;
- Flexibility to accommodate forthcoming transport technological developments, such as any forthcoming new or improved technologies for buses or cars which will contribute to decrease CO₂ emissions or noise. This will improve sustainable transport provision within London.”

SEA Statement.

Following the adoption of the LIP a SEA statement will be prepared which will list the main issues raised during consultation and how these were taken in to account to develop the final LIP. Details on monitoring and other information required as part of the SEA will also be included.

The statement will contain the following information:

- How environmental considerations have been integrated into the plan, for example any changes to or deletions from the plan in response to the information in the Environmental Report.
- How the Environmental Report has been taken into account.
- How the opinions and consultation responses have been taken into account. The summary should be sufficiently detailed to show how the plan was changed to take account of issues raised, or why no changes were made.
- The reasons for choosing the plan as adopted in the light of other reasonable alternatives dealt with.
- The measures that are to be taken to monitor the significant environmental effects of implementation of the plan or programme.