3. Delivery Plan

3.1 Introduction

This chapter sets out our delivery plan to achieve our LIP objectives, as identified in Chapter 2. It is structured as follows:

- Section 3.2 identifies potential funding sources for 2011/12 to 2013/14.
- Section 3.3 summarises our delivery actions for this time period and beyond, and describes how the proposed interventions will deliver our LIP objectives.
- Section 3.4 sets out our high level programme of investment for this time period (extending to 2015/16 with respect to our proposed major schemes), based on the delivery actions. This section also describes how our more detailed annual programme will be drawn up in the form of an Annual Spending Submission to Transport for London.
- Finally, Section 3.5 outlines our approach to programme risk management.

3.2 Potential funding sources

Table 3.1 identifies potential funding sources for implementation of our LIP, including our three-year LIP funding allocation from TfL, contributions from the council's revenue support grant and funding from other sources including developers, local businesses, and specific grants from government (e.g. the Community Infrastructure Fund). These funding levels may vary in total and between individual years of the programme.

Our key source of funding is our LIP allocation from TfL, which amounts to £8 million across three years for LIP-funded schemes.

We have supplemented this with £15 million of the council's own funding. This represents a significant investment in our transport networks given the current economic climate. Of this, £11 million has been allocated to maintenance. This will enable us to meet our challenging road condition target and ensure that Hammersmith & Fulham maintains its high position in the borough road condition ranking. A further £2.3 million has been allocated to our extensive parking control review programme in line with our LIP objectives. £300,000 has been allocated to traffic management and a further £300,000 to smarter travel addressing our specific LIP objectives in these areas.

Funding from third party sources is estimated at £7.3 million, of which the vast majority is made up of section 106 contributions from developers. Development is likely to begin in the five regeneration sites in the borough over the next three years and the figure of £7 million is based on the need to invest in local transport infrastructure improvements to support high density developments in these areas.

Funding Source	2011/12	2012/13	2013/14	Total		
Integrated Transport						
LIP allocation*	£2072	£1988	£1704	£5764		
Council capital/revenue funding**	£1100	£900	£900	£2900		
Third Party Sources	£100	£100	£100	£300		
Developer contributions***	£1000	£1000	£5000	£7000		
Total	£4272	£3988	£7704	£15964		
Maintenance						
LIP allocation**	£450	£450	£450	£1350		
council capital/revenue funding**	£3484	£3533	£3584	£10601		
Total	£3934	£3983	£4043	£11951		
Major Schemes						
Fulham Palace Road slip-road						
LIP major scheme funding	£2760	-	-	£2760		
Other funding sources						
Goldhawk Road						
LIP major scheme funding	-	£1000	£2000	£5000		
Other funding sources		£1000	£1000			

All figures are £000's

^{*} The LIP funding figures are correct as at 4 November 2010. Subsequently the Mayor has announced that the relative reduction in annual funding across London will be partially reversed and that additional funding will be available to boroughs.

^{**} These figures are based on previous years' funding allocations and do not take into account the results of the October 2010 comprehensive spending review

^{***} These figures are a 'best estimate' based on previous developer projects' annual out turns and the predicted level of development in the borough over the next three years, including the five regeneration areas. A number of Development Infrastructure Studies (DIFS) are underway which will clarify this figure in due course.

3.3 Delivery Actions

This section identifies the type of interventions we are proposing to use to deliver our LIP objectives and shows how they will contribute to meeting our targets and the MTS2 goals. The proposed interventions are consistent with the proposals outlined in MTS2 (as summarised in Table A.2, Appendix A), and are based around the following MTS themes:

- Managing and enhancing the transport network
- Encouraging more cycling and walking
- Improving safety and security
- Improving London's environment
- Reducing transport's contribution to climate change and improving resilience
- Managing the demand for travel

The following seven paragraphs (3.4 to 3.10) demonstrate the links between our delivery actions and our seven LIP objectives, and show how our programme will deliver the targets identified in Chapter 4.

The priorities presented here have been subject to an Equality Impact Assessment (EIA), to ensure that they do not discriminate against any groups and that equality is promoted wherever possible. Further information on our delivery actions and the findings of the EIA are presented in Appendix 1.

Each objective has a series of delivery actions that the council and its partners will carry out. These are the same options that were consulted on as part of the transport objectives consultation, the results of which are summarised in our statement of community engagement in Appendix 2.

3.4 Objective 1 – To support sustainable population and employment growth in the boroughs five regeneration areas

We have designated five areas in the borough which we consider to be suitable for significant redevelopment to meet the employment and housing targets set both nationally and regionally.

- White City Opportunity Area
- North Fulham Regeneration area (Earls Court/West Kensington)
- South Fulham Riverside
- Hammersmith Town and Riverside
- Old Oak Common and Hythe Road area

Each of these areas are different in size, profile and transport accessibility and the table below gives the indicative values for new jobs and homes in each area: We consider that the following delivery actions will allow us to meet Objective 1 and our modal share targets set out in Chapter 4.

	Homes	Jobs
White City Opportunity Area	5000	10000
North Fulham regeneration area	2000	6000
South Fulham Riverside	2200	500
Hammersmith Town and Riverside	1000	5000
Old Oak Common and Hythe Road area	1600	5000
Total	11800	26500

• Improvements to bus and rail travel

The borough is highly dependent on the Underground. Thirty-six per cent of our employed residents travel to work by tube - the highest proportion of any London borough. The Wimbledon branch of the District Line in Fulham is the most overcrowded section of Underground in west London. Improving capacity on the Piccadilly Line tube trains is needed in particular and would cater for an expected growth in population and employment opportunities in H&F and west London. Increased capacity would also improve air quality as these changes could reduce the number of people travelling to Heathrow airport by car. We welcome the government's decision to cancel the proposed third runway at Heathrow but there is still scope for an increase in passenger numbers at the airport. The development of the Fulham Regeneration Area in particular is dependent on the planned improvements to the Piccadilly and District lines. While the implementation of these improvements are beyond the council's control, we will lobby in support of them, undertake appropriate complementary access measures on our highway network and, where appropriate, seek to secure developer contributions to the improvements.

Similarly significant regeneration in the borough is reliant on the delivery of Crossrail and the capacity it frees up on the Central Line which serves the White City Opportunity Area.

Promoting high speed rail

We welcome the last government's decision to progress a proposal for a High Speed Rail line (HS2) from London to the Midlands and North, which includes a station at Old Oak Common which will provide interchange with Crossrail, Heathrow Express and the Great Western main line. We also welcome the coalition government's decision to proceed with HS2 and we aim to secure their commitment to the provision of a station at Old Oak Common as soon as possible. Such a station will provide a major stimulus to the regeneration of the area and is supported by Brent and Ealing councils and the Park Royal Partnership.

Construction of HS2 is not expected to start until 2017, after the timescale of this delivery plan, but the council will continue to work with HS2, the Department for Transport (DfT) and TfL on developing studies to support the transport and regeneration cases for an Old Oak Common station and on plans for public transport and road access to the station.

Improved road connectivity

Options for improved road connectivity will be developed and explored for each of the regeneration areas. Improvements at South Fulham Riverside and Old Oak Common are particularly important. Our major scheme at the Fulham Palace Road will improve north-south journey times and reliability. On the whole, however, opportunities for major road construction are extremely limited and improvements will largely be achieved through measures such as 'traffic smoothing' and the review and removal of traffic signals (see below). It would not be possible to provide sufficient infrastructure to meet unrestrained demand. Complementary demand management measures will be needed to ensure that any increased capacity is not taken up by commuters transferring from walking, cycling or public transport.

• Travel Demand Management principles

Travel Demand Management (TDM) is an important tool in managing the impact of

additional trips generated by new development. TDM initiatives come in a variety of packages, from off-street parking policies to master-planning areas to reduce the need to travel, especially by car.

As part of our overall approach to regeneration areas the demand management measures we will promote include restraint-based workplace parking standards, school and workplace travel plans, and the promotion of walking, cycling, public transport, home-working, smart-working and teleconferencing.

According to the latest research from TfL, the average resident of Hammersmith & Fulham makes 2.9 trips per day making the boroughs population one of the most mobile in London. The following table shows how our residents choose to make those trips given the relative availability of the various transport networks.

Mode	Share
Rail	1%
Underground	14%
Bus	17%
Taxi/other public transport	3%
Car/motorcycle	24%
Bike	4%
Walk	37%
Total	100%

Whilst our car/motorcycle mode shares are amongst the lowest in London, we recognise that our borough is suitable for more active modes such as cycling and walking, and that our road network is the most congested in London. We have set challenging targets for walking and cycling which we intend to support with a wide range of projects and initiatives.

In order to support the travel needs of 11,800 new homes and 26,500 jobs, exemplar TDM policies and practices will be required which will be developed through the special planning documents for each site and aligned to the smarter travel programme of work carried out by the boroughs to manage our existing trip making profile.

• Transport studies to support regeneration

One example of this approach is that we are working with the Greater London Authority (GLA) and TfL on a transport study to support varying levels of development within the White City opportunity area. The PTAL of the area is very good with three tube and rail stations serving the area. However the local and strategic road network is already congested and there are limited opportunities to increase capacity. The studies include extensive reviews of the public transport networks, both current and planned, in and around the regeneration areas.

In order to support growth, a package of mitigation initiatives is being prepared to maximise the efficiency of the local transport networks and provide increased capacity where possible. A set of demand management initiatives are to be established as part of the planning framework to maximise mode shift (where people change which form of transport they take) opportunities which will be supported by tailored off-street parking policies and travel planning tools. These include accessibility considerations and consider links to wider social issues such as obesity and health inequalities.

Investment in the local highway and public transport networks will be funded through an infrastructure fund that developers in the opportunity area will have to contribute to enable some of the cost of the interventions to be appropriately spread throughout the opportunity area.

Our programme of investment over the next three years has been tailored to ensure that no highway capacity is removed from the road network surrounding the opportunity area and the wider area of travel influence.

3.5 Objective 2 – To improve the efficiency of our road network.

Due to our location at the western inner/outer London boundary we are plagued by through-traffic using our few river crossings or coming from Heathrow. It is important to maintain economic growth by reducing congestion without releasing suppressed demand through appropriate traffic smoothing techniques.

Hammersmith & Fulham shows the highest annual vehicle delay per kilometre of network, with 7.6 million vehicle minutes being lost each year, followed closely by Kensington & Chelsea with 6.9 million vehicle minutes. (Travel in London, TfL report number 1)

We consider that the following delivery actions will allow us to meet Objective 1 and our modal share, bus and CO2 targets set out in Chapter 4.

Capital investment on the Strategic Road Network

The strategic road network in London is made up of the Transport for London Road Network (TLRN) and the Strategic Road Network (SRN). The following roads are part of TLRN the in the borough. The plan on page 12 shows the TLRN and the SRN in the borough.

- A4 The Westway
- A40 Great West Road
- A3320 West Cross Route

In addition under the Traffic Management Act 2004 several roads were designated as part of the strategic road network (SRN) for which TfL are not the highway authority but have extended powers and responsibilities.

The current TfL programme of investment on the TLRN in Hammersmith & Fulham are two schemes as follows:

- Improving the pedestrian crossing environment at the junction of Talgarth Road with Gliddon Road and Palliser Road.
- Improving the pedestrian and cycling facilities along the A4 Talgarth Road.

We support both these schemes and would welcome additional projects to improve efficiency and safety on the TLRN.

Every year we undertake road condition surveys on behalf TfL and the London boroughs on the SRN (the Road 2000 project). TfL uses the condition data results to allocate funding to the boroughs, and the boroughs use the data to report national indicators and prioritise maintenance works.

The condition data provides information on roads or sections of roads that should be considered for structural maintenance. Overall the condition of the network has generally been improving. However, in some recent years there has been a decline.

The Hammersmith & Fulham borough principal road network (BPRN) is approximately 71.5 lane km in length. If we assume the average lane width is 3.5m (conservative), then the network is approximately 250,000m². Based on historical trends and rates of deterioration we estimate that we need to resurface the BPRN every 10 to 15 years. As a guide therefore approximately 16,500m² should be treated every year to meet this target.

Our current funding of £350,000 per year is sufficient to resurface approximately 10,000m² per annum (resurfacing rate of £35/m²). Therefore if the current level of funding is kept consistent then there will be a shortfall of 6,500m² on the BPRN. 6,500 m² represents around 3 percent of the network deteriorated that has already deteriorated and we are unable to treat.

This will lead to a deterioration in the condition of the network with an increase in the percentage of the overall condition index (CI) greater than 70. This can be seen by the increase in the CI over 70 increasing from 6 percent in 2008/09 to 8.4 percent in 2009/10. This trend is likely to continue

We therefore continue to be concerned that, unless funding is provided, the condition of the network will deteriorate to a point that will take many years to address and subsequently reduce the backlog to acceptable levels.

Coordination of roadworks

H&F are one of the pioneer boroughs to introduce a permit system for roadworks. This has given us greater power to coordinate roadworks and reduce disruptions.

The Traffic Management Act 2004 put into place a number of changes regarding the management of road and street works as well as a number of other activities. It set in place a legal requirement for each highway authority to effectively manage their network while taking into account the impact of such works/activities on neighbouring boroughs' networks. This was under Section 16 of the act called the **Network**Management Duty (NMD). This placed a duty on the council to effectively coordinate all works/activities on the network, with a view to achieving (so far as may be reasonably practicable having regard to their other obligations, policies and objectives) the following overriding objectives:

- a) securing the expeditious movement of traffic on the authority's road network
- b) facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority.

In addition the Traffic Management Act 2004 allowed the council additional controls in the form of setting up a Permit Scheme which allow the council to charge a fee for assessing work permits and to impose conditions on works that would help minimise disruption.

In October 2009, with 18 other councils, H&F devised and ran a pilot permit scheme, which became the first such programme in the UK. In January 2010, the London Permit Scheme (LOPS) was introduced permanently. It enabled more effective coordination applying the following guiding principles:

- a) Advance plan and coordinate works with all stakeholders
- b) Ensure safety
- c) Minimise inconvenience to people using a street, including a specific reference to people with a disability
- d) Protect the structure of the street and the integrity of apparatus

It is the objective of the LoPS to achieve the following:

- a) Provide an environment to help each of the permit authorities operating the LoPS to meet their NMD; and
- b) Support those seeking to minimise disruption and inconvenience across London by encouraging good practices, mutual and collaborative working arrangements and a focus on coordination and getting it right
- c) Encourage a high emphasis on safety for everyone including site operatives and all other road users with special emphasis on people with disabilities
- d) Encourage a sharing of knowledge and methodology across the industries working within the London Permit Scheme
- e) Emphasise the need to minimise damage to the structure of the highway and all apparatus contained therein
- f) Provide a common framework for all activity promoters who need to carry out their works in London
- g) Treat all activities covered by the scheme and activity promoters on an equal basis.

The scheme evaluates these objectives and makes sure they are being met by having four focused taskforce groups consisting of both member highway authorities, public utilities as well as independent stakeholders to monitor the key performance indicators (KPI) and objective measures (OM). A permit operational committee has also been set up to establish the scheme and monitor that objectives are being met.

The key performance measure is as follows:

- KPI 1 The number of permit and permit variation applications received, the number granted and the number refused
- KPI 2 The number of conditions applied by condition type.

In addition each LoPS permit authority will also apply the optional KPIs 4 and 5 from the Permit Code of Practice to demonstrate parity of treatment between their own road works and streets works undertaken by statutory undertakers.

- KPI 4 The number of occurrences of reducing the application period
- KPI 5 The number of agreements to work in Section 58 and Section 58A restrictions. (Details of Section 58 and 58A restrictions will be provided as required under Section 8.3 of the Code of Practice for Permits).

These KPIs apply to both road works and street works and will be produced at least once a year and will be discussed at coordination or similar meetings. KPIs 1, 2, 4 and 5 will also be used to measure parity in respect of the application of the provisions of the Permit Scheme. If any promoter considers that they are not being treated in accordance with Regulation 40 then they can take the matter up either through the regular coordination or similar meeting or the dispute resolution procedures highlighted in Section 16.

In addition the scheme set up objective measures (OM), on which each council must report. These are as follows:

OM 1 - Average journey times

- a) To compare average journey times pre and post LoPS implementation.
- b) To compare average journey times on routes through authorities operating LoPS to similar routes in authorities not operating LoPS.

OM 2 - Journey time reliability

- a) To compare journey time reliability on routes pre and post LoPS implementation.
- b) To compare journey time reliability on routes through authorities operating LoPS to similar routes in authorities not operating LoPS

OM 3 - Number of days of Section 74 (work overruns)

a) The percentage number of overrun days pre and post LoPS implementation.

OM 4 - Average duration of works by work type

- a) The average duration of works by work type pre and post LoPS implementation.
- b) The average duration of works by work type on a permit application compared to the granted permit

OM 5 - Inspections

a) The number of failed sample A and permit condition checks as a percentage of the total number of those inspections undertaken

OM 6 - Number of collaborative works

- a) The number of instances of collaborative working as a percentage of the number of permits issued.
- b) The total concurrent number of days of collaborative working compared to the total number of days if those works had all been carried out separately.

OM 7 - Number of deemed permits

a) The number of deemed permits as a percentage of the number of permits issued per work type and road category.

OM 8 - Number of conditions applied by condition type

a) The number of conditions applied by condition type as a percentage of the number of permits issued and compared between LoPS permitting authorities.

OM 9 - Number of times that works have been undertaken on a road with S58 or S58a restrictions

a) The number of times works take place on roads with a S58 or S58a restriction pre and post LoPS implementation.

Smarter travel demand management initiatives

Smarter Travel is the umbrella programme of work which describes the initiatives and projects that promote sustainable and active modes of transport. It covers projects from road safety to business travel planning all with the same goal to encourage fewer trips by car.

We have an extensive Smarter Travel programme which, by encouraging walking, cycling, public transport use and home-working, reduces the number of car journeys for which there is an acceptable alternative, thereby reducing congestion and improving the efficiency of the road network. Measures include school and workplace travel plans, travel awareness campaigns and road safety education and training, which by reducing collisions will reduce disruption to the highway network.

On-street parking restrictions and enforcement

Incidences of congestion can often be traced to incidences of illegal and/or inconsiderate parking. Parking controls will be reviewed as part of our corridors and neighbourhoods programmes and we also have a programme of reviewing our controlled parking zones (CPZ). For example, we intend to consult on a match day parking scheme in the south of the borough, which would reduce football match car traffic.

The Traffic Management Act 2004 provides for the decriminalisation of moving traffic offences and the council has been taking enforcement action against a number of them. We use our increasing network of CCTV cameras to facilitate this enforcement and we intend to procure a mobile enforcement unit to cover those areas that cannot be enforced using our static cameras.

Highway network performance monitoring

We prioritise road investment using a simple assessment tool taking into account all the appropriate modal inputs that were the basis of LIP1 capital funding.

We propose to deliver significant improvements to Fulham Palace Road, Askew Road and Goldhawk Road over the three year period of the LIP2 delivery plan. Goldhawk Road will be subject to a major scheme submission on the basis of an independent multi-modal visioning study completed in October 2010. The study broadly indicates that significant benefits can be made to Goldhawk Road without compromising the effectiveness of it to support its current and predicted levels of traffic. The early cost estimates for this flagship project are £5m, which in the current financial climate, will be difficult to secure. However we are confident that with the current available sources of funding, including developers and the business case the study promotes, that the scheme is viable and deliverable.

• Traffic signals timing review and rationalisation

We will continue to work with TfL to support their signal timings review programme and modernisation programme. We support the rationalisation of traffic signals on our network and will work with TfL to identify those sites we believe to be extraneous and consult on alterations to increase network capacity and reduce congestion.

We are one of only a few boroughs to have already removed traffic signals from our network. In 2008 as part of a bus priority scheme on Hammersmith Road, a three-arm signalised junction was removed from the network and replaced with a single straight-across puffin crossing. The joint benefit of this, with associated bridge strengthening and new peak time bus lane was a saving of 29 seconds per bus. With 40 buses per hour, this provided good value for money with a first year rate of return of 90 percent on a £1 million investment.

In 2010 we identified a further set of signals that were potentially unnecessary. On Shepherds Bush Road two pelican crossings are closely located between the junctions of Netherwood Road and Blythe Road. We carried out a feasibility study as part of our 2010 local transport funding programme to assess performance and followed this with a local consultation regarding the potential removal of the northernmost crossing. The consultation was positive and the crossing has since been removed leaving the existing traffic island and upgrading of the southern crossing to a puffin along with improvements to the side road junctions approaching the retained crossing.

• Bus Priority

Both TfL and the council have a role to play in the efficient movement of buses through our road network. In January 2011 an audit was carried out across all 45 bus lanes in the borough in order to assess their current restrictions and enforceability. The results of this review have influenced the capital programme of investment and works are planned under the councils CPZ programme and the 11/12 corridors programme to ensure that our bus lanes are fit for purpose and current traffic conditions.

Our flagship major project at Fulham Palace Road has been shown to significantly improve bus journey times at this busy junction. This together with our integrated transport funded corridor scheme that will see a significant amount of pelican crossing upgraded to puffin crossings will further improve bus journey times and service levels for the many residents who use this mode.

The principle of bus priority project work was well developed and delivered over the last eight to ten years for a key input into our integrated transport corridors programme. In addition to Fulham palace Road 11/12 will see another key north south route in the borough addressed, Scrubs Lane.

Cycle parking and Cycle Super Highways

Over the last ten years we have implemented many projects under the Local Cycle Network (LCN) programme and installed many on street cycle parking facilities. The last comprehensive count was carried out in 2001 which revealed that we had capacity to park 1500 cycles on street (to dedicated cycle stands). Given the level in investment over the last 10 years it is likley that this figure is now well over 2000.

Through our integrated programme of investment and planning procedures we aim to install space for 100 bikes to be parked on street per year. Given our aspirational regeneration targets and trajectories and the draft replacement London Plan housing

targets it is likely that another 2000 cycle parking spaces will be delivered off street as part of developments. This is broken down across the three years of the LIP2 deliver plan to; 500 spaces in 2011/12, 700 spaces in 2012/13 and 800 spaces in 2013/14.

There are two planned cycle superhighway routes planned to pass through the boeough in the coming years. Route 10 in Shepherd's Bush in the longer term and route 9 from Hounnslow to Hyde Park in the short term. We fully support the principles of the cycle superhighway programme and will work with TfL on its successful design and implementation.

The implementation of these routes will help us to achieve our aspirational cycling targets which we will support through the implementation of supporting measures such as additional cycle parking facilities along the route and cycle training delivered as part of our smarter travel programme.

3.6 Objective 3 – To improve the quality of our streets

Streets account for the largest part of public realm within our borough. They are an important part of our daily life, whether we walk, cycle or drive.

The appearance of the street will be a major factor in determining the quality of the local townscape. Our perception of places is shaped to a large extent by our experience of the streetscape.

The character and appearance of the boroughs streets is largely dictated by the demands placed upon them. For example, Hammersmith Broadway is a very busy interchange and important traffic node, whereas many of our residential streets have relatively low traffic flows, fewer signs, less clutter and a quieter, greener streetscape character. Good streetscape design should reflect this difference and promote street design which enhances local distinctiveness within an overall consistent framework. (Taken from the introduction to Streetsmart our highway design guide – 2005)

We consider that the following delivery actions will allow us to meet Objective 1 and our modal share, bus and CO2 targets set out in chapter 4.

• Annual programme of investment in local transport

In the current age of austerity we seek to ensure that our annual programme of investment achieves the best return possible in terms of improvements to the quality of our streets. Consultation is a key element of this. We also work carefully to ensure synergy between the council's divisions and departments, particularly capturing any opportunities from combining our maintenance work with a wider examination of transport issues. This includes reviewing traffic calming in all streets which are to be resurfaced and carrying out a street-scene audit to help reduce street clutter.

Our annual programme of investment includes highway and footway maintenance and neighbourhoods and corridors programmes, all of which aim to improve the quality of our streets. The plan on page 38 indicates the indicative projects from the corridors and neighbourhoods programme of works we intend to deliver in 2011/12.

Highways Asset Management Plan (HAMP)

The production of a highways maintenance management plan is not a statutory requirement, however we do have one in place that was approved in June 2006 and is under review at the moment.

Case Study 1 – Goldhawk Road

Goldhawk Road Urban Realm Visioning Study Brief

Goldhawk Road runs between Shepherd's Bush Green in the east and Chiswick High Road in the west presents an unattractive and run down face. It is a wide road and the sections to the east of Coningham Road have been characterised by long stretches of central guardrail, which we have been progressively removing. This acts as a psychological as well as physical barrier to the two sides of the road. The study will be concentrated on the section east of Paddenswick Road, some 850 metres in length, however not forgetting the western section. The main section has a fairly even mixture of residential and commercial frontages, with commercial tending to predominate towards the east and residential towards the west. It contains Goldhawk Road underground station, on the Hammersmith and City/Circle lines, which has recently seen a large increase in the frequency of its service as a result of the reorganisation of the Circle Line, and the Southern entrance to Shepherds Bush market, for whose regeneration the council has recently issued a consultation draft brief. Goldhawk Road is on the London Bus Priority Network and has two high frequency routes, 94 (Acton Green-Shepherds Bush- Piccadilly circus) with 13 buses per hour and 237 (Hounslow - Brentford-Chiswick-White City) with 8 buses per hour in each direction.

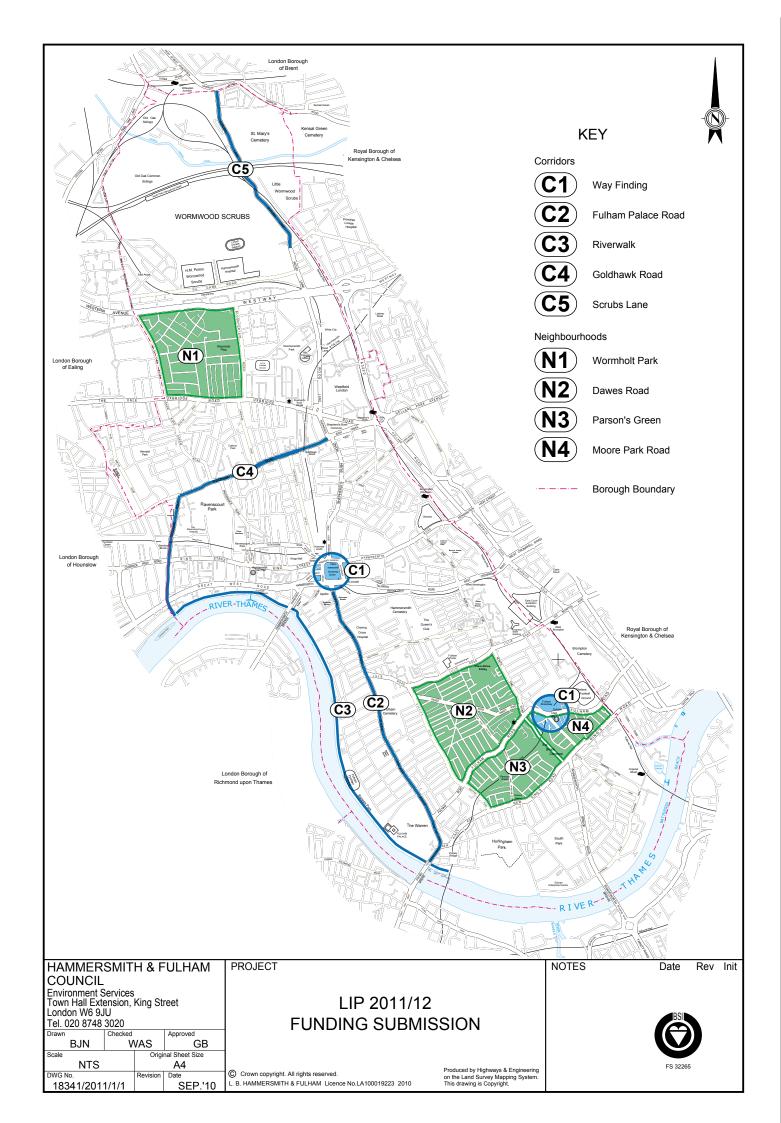
We believe that there is great potential to overcome this barrier effect and stimulate the regeneration of Goldhawk Road by giving it a highway/urban design "makeover", drawing on the experience of recent cases such as The Cut in Southwark and Lambeth, Walworth Road in Southwark, Exhibition Road in Kensington and Chelsea and Ashford in Kent.

We have commissioned a visioning study which could show how the carriageway and footway space in Goldhawk Road could be redesigned so that the barrier effect could be overcome, street furniture rationalised and de-cluttered, high quality 'streetsmart' materials used and the road's ability to function improved, as a "living street" as well as a place for people to move along and across on foot, by bike, buses and private motor vehicles and for the movement of goods.

The study looked at:

- Land uses along the road residents and businesses, their needs for servicing and how these can be managed and improved
- Pedestrian movements along and across Goldhawk Road
- Bicycle movements along and across Goldhawk Road
- Bus movements along Goldhawk Road and the provision of comfortable, convenient and accessible stops
- Private car, taxi and goods vehicle movements along and across Goldhawk Road
- Meeting the needs of disabled people to move along and across Goldhawk road, e.g. by providing level footways, dropped kerbs and tactile paving, decluttering street furniture to provide unimpeded passage.
- The history of personal injury accidents on Goldhawk Road with a view to mitigating underlying trends.
- Providing as many trees as possible to the extent that this is compatible with the other aims of the study.
- Improving the perception and reality of safety and security in Goldhawk Road and its junctions neighbouring streets.
- Carry out a streetscape healthcheck as advised by the Council's Streetsmart Design Guide to identify the potential for improving the visual aspect of the street in order to achieve a high quality public realm.

The vision document aims to show what could be done in Goldhawk Road. It is grounded in reality – i.e. assuming that the road will have to handle broadly similar levels of traffic to the present, but imaginative and will seek to meet the needs of the mobility and visually impaired community. It does not present a detailed programme of implementation but gives some indication of how it could be implemented incrementally, subject to resource availability, and a broad assessment of costs



The document describes the highways maintenance service, incorporating maintenance strategy, policies and standards and specifying how maintenance works are delivered. It is based on risk management, conforms to the requirements of the 2005 code of practice for highways maintenance management, and adheres to the principles of best value and continuous improvement.

The document is divided into the following sections; Introduction, Policy Framework, Service Delivery, Maintenance Strategy and Hierarchy, Inspection, Assessment and Recording, Condition Standards, Programming and Priorities, Sustainable Highway Maintenance, Financial Management and Performance Management.

It is through this plan and its current review that we shall work towards meeting our statutory obligations and our asset management targets as set out in chapter 4.

Extensive consultation for road improvements

Engagement with the local community is seen as a key to the successful implementation of schemes. The council carries out 'blank canvas' consultations on all neighbourhood and corridor schemes where we seek to identify the concerns and issues of local people before considering any designs or proposals for the area. We then carry out further consultation on the proposals.

Additionally we seek to establish local stakeholder groups to work with on the detail of the schemes that we design. For example our proposals for improvements to the pedestrian realm of the Thames Path east of Putney Bridge in 2010/11 have been assisted by residents of the local senior citizens' home which is adjacent to and overlooks the Thames Path. Officers met these residents at an early stage of the design process and ensured that their local knowledge of the area and ideas for improvements were taken on board in the final design.

Consultation with blind and visually impaired people, as well as the disability forum, is essential should the council seek to promote a 'shared surface' scheme. The successes or otherwise of shared surface schemes lie in the balance of accessibility, aesthetic and practical considerations and current legislation.

Wayfinding, pedestrian directional signage system

The council aims to be sensitive to the needs of local people and aims to align its annual programme to address specific community concerns. A case in point was the opening of Westfield shopping centre in Shepherds Bush in 2008, which is the largest urban shopping centre in Europe. Local businesses including representatives of Shepherds Bush market were concerned that they would lose business and that the increased footfall resulting from Westfield would not translate into benefits for the wider business community in the area. They were particularly keen to have new signage introduced in order to ensure that visitors to the area were aware of the nature and location of points of attraction in the wider Shepherds Bush area. We responded to these concerns by prioritising the design and erection of Legible London wayfinding in this area.

The council set up a local stakeholders group consisting of officers, business owners and residents in order to ensure that the design captured all local points of interest. The erection of wayfinding pillars was matched by the removal of other signs in the area as part of a decluttering exercise.

The wayfinding signs are a product of the Transport for London's Legible London system of wayfinding. This type of signage differs as it uses a 'heads-up' rather than north-

up means of navigation depicting the face of the map as the same way as the user is facing. This helps people understand their immediate environment more easily and, in particular, it empowers deprived neighbourhoods to capitalise on the opportunities that reside close by. We plan to extend the system of wayfinding to the town centres in Hammersmith and Fulham in conjunction with additional streetscape improvements and decluttering.

Decluttering our road network

Removing redundant signs and street furniture, combining lots of signs onto one post and removing guard rail unless there is a clear reason for them, will all improve the aesthetic quality of streets and make them more pleasant for pedestrians, particularly for people in wheelchairs and with buggies.

To date we have removed over 1,000 pieces of redundant street furniture and over 5km of pedestrian guardrail.

We will continue to take this decluttering approach and where wholesale removals (or installations) of street furniture are proposed we will seek the comments and approval of our key stakeholders. The removal of street furniture is contained within the councils 'Drivers Charter' where a target for the removal of signs is set at 400 over the next two years

The Streetsmart highways design guide

Streetsmart, the council's design guide was developed initially in 2005 to successfully manage the design and maintenance of our streetscape.

Today this guidance consists of two volumes which include the standard detail drawings required to ensure quality standards and consistency and to deliver better legibility, accessibility and sustainability. We are in the process of reviewing the content in the guide to ensure the standards are all up to date with current best practice methods and materials to oversee the next five years of work across the borough.

Neighbourhoods investment programme

Our neighbourhoods programme takes a holistic view of particular areas, looking at them from the point of view of all users – pedestrians, cyclists and drivers, but from the perspective that our neighbourhoods are primarily places where people live rather than travel through. The council seeks to include decluttering and accessibility improvements as a core element of each scheme.

An integral input into all our neighbourhood schemes is a thorough review of the accessibility of the local highway network. Where they are not provided dropped kerbs will be installed and footway gradients at formal and informal crossings amended to the most up to date accessible standards.

Our delivery plan through the 2010/11 transition year to the timescale of this LIP2 (to 2013/14) provides funding for four financial years and subject to indicative funding levels being maintained we intend to cover every street in the borough with a neighbourhood scheme during this period.

More street trees

We will plant trees where possible and appropriate as part of our neighbourhoods and

corridors programmes. Trees can help improve air quality, improve the look and feel of streets, and assist traffic-calming by conveying a message to drivers that they are in a residential area.

In the past two years we have been granted funding though the Mayor's Street Tree Fund and in both years delivered our full allocation. Finding and funding suitable planting sites is becoming increasingly difficult.

Trees that are damaged or die are replaced wherever possible.

3.7 Objective 4 – To improve air quality in the borough.

Road transport is one of the main sources of air pollution in the borough. 67% of small particulates (PM10) and 41% of oxides of Nitrogen (NOx) come from road transport in London. Transport also accounts for around 22% of CO2 emissions in the capital, of which 80% comes from road vehicles. The other main environmental impact that traffic has in the borough is noise, which can cause serious disturbance particularly where people live in close proximity to busy roads.

Taking measures that help improve air quality can also help tackle climate change. Promoting smarter travel choices, particularly to encourage people to use more sustainable modes of transport (public transport/cycling/walking) for shorter journeys will help reduce emissions of CO2 and have a positive effect on local air quality. Achieving a modal shift away from car journeys and increasing the number of people walking and cycling could also have beneficial effects for the local environment in terms of reducing traffic noise in some parts of the borough.

Supporting the use of low emission and electric vehicles (e.g. by helping develop recharging points in the borough) can be beneficial for local air quality and reducing CO2 emissions. Hybrid and electric vehicles can also help reduce traffic noise as they are much quieter than conventional vehicles, even if, for safety reasons, they are equipped to make some noise at low speeds.

We consider that the following delivery actions will allow us to meet Objective 1 and our modal share, bus and CO2 targets set out in Chapter 4.

Smarter travel

Our Smarter Travel programme aims to encourage walking, cycling and home-working, thereby reducing the amount of motorised travel and contributing to improved air quality.

In 2010 we launched the boroughs smarter travel service which brought together the road safety education and travel planning business areas. The concept was based on successful campaigns at Richmond and Surrey London boroughs, however on a more modest scale.

We have maintained approximately a 15% allocation from our integrated transport funding to support smarter travel projects and the details can be seen in our programme of investment on pages 61 to 65. Our smarter travel programme for 11/12 to 13/14 is broken down into four broad areas: children's education, training and publicity (ETP), cycling campaigns, general campaigns and travel awareness.

Children's ETP covers our practical in school training covering pedestrian training and the Roadwise Rangers project that will soon have its own website and is a tool to join up road safety education and sport in a fun and engaging way.

We have set ourselves some very aspirational cycling targets and to support our capital programme of investment we carry out annual cycling campaigns, including at the moment a hard hitting cycling and HGV awareness campaign.

General campaigns cover a variety of smaller initiatives including drink and drug driving and seatbelt awareness campaigns using our 'one of a kind' seatbelt demonstration sledge. This simulates an 8mph crash and is a very powerful tool in encouraging both adults and children to 'belt up'.

Travel awareness campaigns are covered in more detail further in paragraph 3.10 and are accompanied by a case study – changing places.

More Street trees

Our approach to street trees is set out on page 44.

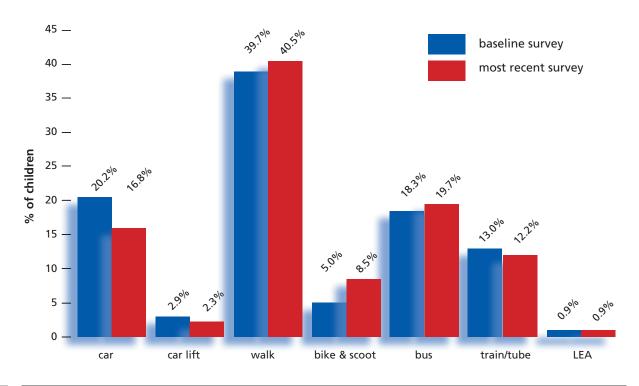
School and business travel planning

Our business travel planning programme is very successful through the development control process and we intend to roll this out to existing businesses in the three main town centres over the next three years. We currently work with and fund Westrans to co-ordinate this activity on our behalf using the framework set up by TfL. However, subject to resources, we aspire to a business travel planning post established within the council.

Seventy-two of the borough's 73 schools have completed a travel plan, of which 58 are currently valid (i.e. new, reviewed or rewritten in the past year). The chief focus of the school travel plan is to cut car use on the school run and promote the move to walking and cycling.

We have the most congested roads in London and based on our continuing successes with school travel planning we have selected the school run as one of our two local targets.

School Travel - % by mode



In addition to the mandatory targets of increasing cycling and walking we have chosen a target to increase these two active modes of transport for school trips. Our baseline is 42% collected in school and our target for the end of 2013 is 49%.

The graph shows combined data from 69 schools across the borough which have all done at least two pupil travel surveys and can therefore compare baseline data (collected before the travel plan was in place) with more recent data. It shows that car use has fallen from 20% to 17% and walking, cycling and bus use have all risen.

• Cleaner vehicles and smart parking policies

We are becoming a member of the FORS (Freight Operators Recognition Scheme). When ordering/leasing new vehicles, we specify the smallest, cleanest engines. Our vehicles are Low Emission Zone (LEZ) compatible and compliant with European standards. We are entering into a joint procurement contract with Westminster Council on school transport which specifies the use of cleaner vehicles and efficient routing to minimise vehicle miles. The council operates a passenger rickshaw which is used at community events and festival. We also have an electrically assisted freight tricycle which is currently being used by the Hammersmith Business Improvement District.

Car clubs and electric vehicles

One of the main contributors to poor air quality is traffic pollution. It is therefore important that we reduce our reliance on road transport wherever possible. Car clubs can play a role in supporting mayoral targets across a number of key strategy areas. Economically they can help reduce congestion and parking pressures, particularly in new low-car housing developments. Socially, they compliment the public transport system in providing accessibility to key services and facilities without the related costs of car ownership. Environmentally, they help reduce car usage and the associated pollution.

The council is working in partnership with operators to find appropriate numbers and locations of parking spaces so car club networks can grow. The Council will also support activities to raise awareness of the availability and advantages of car clubs. The plan on page 51 shows the proposed on street car club bays that are being trialled, starting in 2010.

The council has worked with partners to develop off-street electrical charging points for electric vehicles and aims to expand this provision to on-street parking in the future. The map below shows the off street electrical charging points in and close to the borough.

Location of "off street" electric vehicle charging points

- 1. Hammersmith Hospital, Du Cane Road, W12 0HS
- 2. Charing Cross Hospital, Fulham palace Road, W6 9NT
- 3. Kings Mall Car Park, Glenthorne Road, Hammersmith, W6 0LJ
- 4. Westfield Shopping Centre

3.8 Objective 5 – To make it easier for everyone to gain access to transport opportunities.

We recognise that travel needs vary between individuals and that travel options are not available to all due to many factors such as cost or mobility. Travel is a derived need in that it is a means to an end to either get to somewhere such as work, school or the shops or to get home.

In order for everyone to meet their travel needs we have integrated accessibility into our programmes of investment. We will continue to lobby public transport operators and authorities to install step-free access to bus, underground and overground stations and when we improve the road network incorporate the needs of mobility impaired road users in our designs.

Our access for all planning document sets out how we expect new developments to meet with our aspirations and standards we consider appropriate. Furthermore our Streetsmart design guide was developed with the disability forum whose members are consulted on all highway works.

Supporting public transport improvements

Our approach to supporting public transport is set out on pages 32 and 39.

Accessible road design

A key input into our corridors and neighbourhood programmes of investment are the needs of all road users. We have a very good working relationship with Hammersmith & Fulham Disability Forum and through them have prioritised areas that would benefit from accessibility improvements. It is using this geographical overlay to the borough we have developed the three year rolling neighbourhoods programme which seeks to cover every road in the borough.

We have a well established streetscape design guide that promotes the concept of 'naked streets' removing all unnecessary street furniture. We have supported this approach since 2005 and in that time more and more local authorities have responded with a similar interpretation of modern traffic engineering.

As part of our CPZ review programme and planned maintenance programme we carry out 'value added engineering' in regard to increasing the accessibility of our road network. Our streetsmart design manual specifies that every dropped kerb on our network should be accompanied by a double yellow line to ensure that cars do not park and obstruct the informal crossing points.

• High quality pedestrian environment

With one of the highest proportions of walking trips in London we recognise that walking is one of the most important methods of transport in the borough. Even those who drive and get the bus must first walk to the station or from their car making walking an integral part of every single trip made.

The table on page 25 indicates the level of funding that is invested in our road network for which a considerable percentage is for improving the pedestrian environment.

From 2005 to 2007 we invested over £5 million in our three town centres; Hammersmith, Fulham and Shepherd's Bush creating three distinct high quality pedestrian environments. Footways were widened, high quality York stone paving installed, unnecessary clutter removed, crossings relocated to pedestrian desire lines and tactile paving installed.

Better bus stops and stations

The council has made extensive progress in improving the accessibility of its bus stops through the TfL Bus Stop Accessibility Programme, S106 contributions and the opportunities offered through footway maintenance improvements. These

improvements, to TfL standards, will continue to stops and the approaches to them through the corridors and neighbourhoods programmes, and the standards are being incorporated in the council's streetsmart document. Progress will be regularly monitored with key stakeholders with an interest in access issues.

Opportunities are also being taken to promote the best possible standards of passenger information as is currently being introduced with TfL's Countdown system at bus stops.

Whilst new bus and rail stations would be dependent upon development opportunities, access improvements to the approaches to existing stations will continue – as is currently happening in the Ravenscourt Park area and Du Cane Road.

Accessible neighbourhoods

Officers work closely with Hammersmith & Fulham Disability Forum on proposals to improve accessibility as part of neighbourhood improvements. We discuss at Disability Forum meetings how members will give the council their input on schemes at the start of the year, at the disability forum's meetings.

Accessibility improvements are identified by officers and submitted to forum members for their views. This can include volunteers from the forum carrying out their own site visits before reporting back to officers.

3.9 Objective 6 – To support residents and businesses by controlling parking spaces fairly

With three football clubs, two international exhibition centres and 17 tube stations demand for on-street parking is extremely high in the borough.

The increase in blue badge fraud in the borough is of particular concern as it abuses the on street disabled parking facilities provided. We are taking action to tackle this as well as illegal parking at bus stops that compromises the drivers' ability to stop next to the kerb and use the step free access facilities.

• Controlled Parking Zone review programme

We have a 'small zone' system of CPZ's which covers the whole of the borough except the Hythe Road industrial area in the far north of the borough. This discourages short intra-borough journeys and protects residents who live near tube stations and town centres. We currently have a total of 27 zones.

The vast majority of bays are shared use between permit holders and pay and display users. This makes the most efficient use of scarce parking space.

We have an ongoing programme of review of our CPZ's depending on problems and issues reported by residents' such as the effects of the Westfield Shopping Centre and the football grounds in the borough.

Flexible charging options

The council has introduced the SMART Visitor Permit, which allows visitors of residents in some of the borough's CPZ's to park during controlled hours, regardless of the maximum stay for the area. It also provides a convenient cashless method of paying for parking as well as a cheaper alternative to the regular pay and display tariff.

The permit includes a 50% discount for the first 240 hours a year for disabled residents' visitors.

The permit acts like an Oyster card where residents credit the balance (minimum top up of five hours at a time) and then use it as and when required. Using the SMART visitor permit, parking time is charged by the minute and deducted from the available credit.

The council is also currently operating electronic residents' parking permits in three Controlled Parking Zones (Zones K, L and R) on a trial basis. These permits also allow residents to use the permit for cashless pay and display parking in other zones in the borough.

CASE STUDY 2 – MATCHDAY PARKING

Our relatively small borough has three football clubs and the challenge has been to respond flexibly to the requirements of residents and their visitors, while ensuring the continued vibrancy of commercial areas located close to the clubs.

In December 2007 we successfully introduced a ground-breaking football matchday parking scheme to reduce the impact of visitor parking in the vicinity of Fulham Football Club. The scheme harnesses the very latest electronic sign and permit technologies to enable the scheme to be flexible in reacting robustly to any changes in football match fixtures.

Our research showed that football supporters were willing to walk considerable distances from their car to the ground which influenced the extent of the scheme. We installed a series of electronic signs at the CPZ boundary that were all linked by GPRS allowing us to change the days and times of operation of the CPZ to suit the fixture list. In addition the maximum pay and display time for non residents or their visitors was reduced to one hour and electronic smart residents permits were issued which could allow official visitors to pay for their parking electronically like an oyster card.

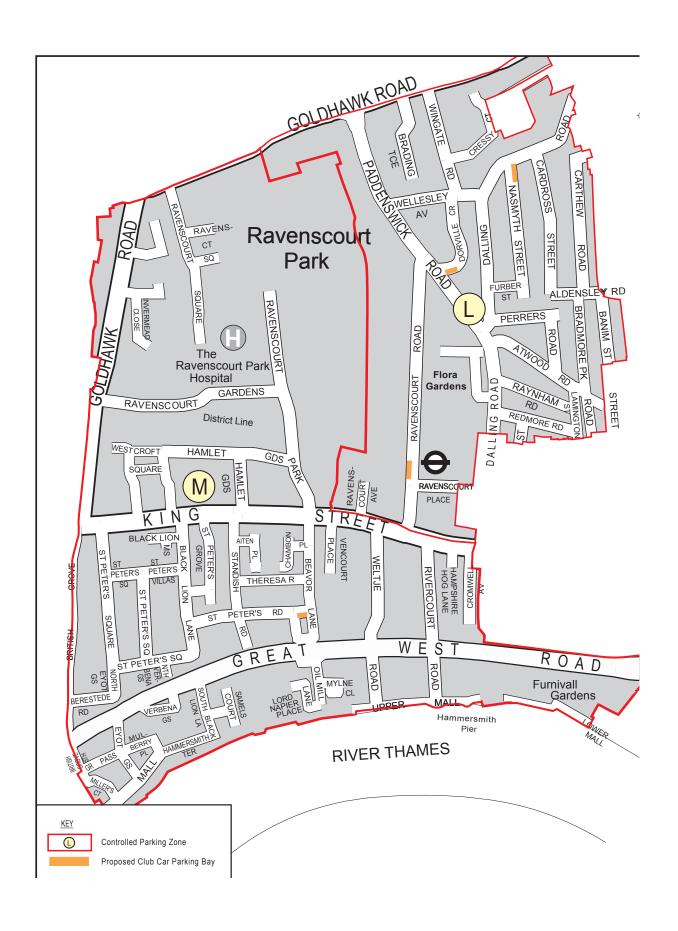
The scheme was a success with 80% less pay and display parking on matchdays, with no reduction in attendance for the club. We have had no reports that the system is misunderstood by motorists and no cases on disputed PCNs to date.

Car clubs and electric vehicles

The Council is working in partnership with operators to ensure the appropriate number and location of parking spaces so car club networks can grow. The Council will also support activities to raise awareness of the availability, and advantages, of car clubs. The plan below shows the location of the first on street car club bays to be trialled in the borough

The council has secured £100,000 of funding from TfL for 11/12 and 12/13 to assist the further roll out of on street car club parking bays. This programme will be developed based on the results of the on street trail as above and co-ordinated with our integrated transport programme (most notably our neighbourhood's programme). We are aiming to implement 60 on street bays per year, which will be subject to detailed design, procurement matters, local support and political approval.

The Council has worked with partners to develop off street charging points for electric vehicles. A schedule of the charging points is shown on page 47. Because of the high levels of parking stress in the borough, there is no scope for the provision of on-street charging points in the borough. However, we will follow the London Plan quidelines of providing electric charging points at 20% of the parking spaces in new



developments in the borough. Depending on the scale, timing and rates of parking provision at developments in the borough's regeneration areas, we would expect some 1200 charging points to be provided within the lifetime of the plan.

Personalised blue badge bays

We are part way through a trial to provide personalised residential personalised blue badge parking bays. The response we have had is encouraging and we shall seek to roll this out further across the borough along with a review of blue badge spaces and parking in our three twon centres..

3.10 Objective 7 – To reduce the number of people injured and killed on our streets.

Road safety has been and will continue to be one of the high priorities for the council, as was outlined in our first local implementation plan 2005 – 2009.

In 2009 there were 722 people injured on the roads of Hammersmith & Fulham. Of these 93 suffered serious injuries or were killed and 629 suffered slight injuries.

Road traffic accidents cost the borough, the tax payer and the NHS millions of pounds each year and the people injured and their families are those seriously affected.

We want to focus our limited and reduced resources on protecting the borough's many vulnerable road users which involves developing innovative and holistic solutions to a wide range of road safety issues.

Every year we form closer links with the Metropolitan Police, TfL and the Royal Borough of Kensington & Chelsea, working together to save lives on the borough's roads. It is only with our combined efforts that we can have a significant impact on the lives and wellbeing of people in the borough.

• Safety on the Strategic Road Network

In 2009 there were 637 accidents on the roads in Hammersmith & Fulham resulting in 722 casualties. Of these 55 accidents were on the TLRN resulting in 66 injuries.

We will continue to work with TfL on road safety initiatives and continue to lobby them for data led road safety engineering projects to be developed and delivered on the TLRN in the borough. The nature of the TLRN leads to higher speed accidents resulting in higher severity casualties. For us to meet our national and locally set casualty reduction targets we will rely heavily on TfL to continue to assess the road risk associated with their network and provide bespoke solutions to areas identified.

Casualty data review and site prioritisation

A detailed annual examination of road traffic casualty data is carried out by officers. This seeks to both establish trends and types of casualties to then decide on road safety education initiatives to identify particular locations, routes or areas where casualty rates raise concerns. These concerns may warrant a particular corridor or neighbourhood being given a high priority and included into the annual programme or suggest that a site could benefit from a separate intervention funded from the council's local transport fund.

For example, the Brook Green area was made into a 20 mph zone about five years ago. An examination of the pre and post casualty data revealed a 50% reduction in

casualties. However the number of casualties occurring after implementation suggested more road safety measures could help reduce casualties further. Brook Green was therefore selected as a neighbourhood area in 2010/11.

Road Safety Engineering

In a similar way to bus priority the concept of road safety engineering (formerly delivered under dedicated programmes, local safety schemes and 20mph zones) now forms a key element of our integrated transport programme supported by the casualty data review and site prioritisation work above. We have maintained the use of the first year rate of return as a value for money tool in these austere times.

The inaugural neighbourhoods and corridor schemes, mostly delivered in 2010/11 saw a considerable number of road safety engineering improvements to our road network. In Askew Road we installed a number of raised entry treatments which have been proven to reduce casualties and improve the walking environment for the mobility impaired as well as buggies and pushchairs. In Brook Green we re-engineered a key junction in one of first 20mph zones as a result of the casualty analysis and local representation.

We are well aware of the growing disquiet regarding traditional traffic calming (such as speed bumps and cushions) and we have responded to this using current and emerging legislation. Wendell Park neighbourhood will see the first 20mph limit in the borough supported by signage only, in a similar way to successful pilots in Portsmouth and Hull.

• Free cycle training for adults

A three year cycle training contract was signed in November 2010, with four elements including all ability adult cycle training. This is offered on one to one basis for complete beginners through to cyclists looking to build skills and confidence to negotiate the road network. These skills along with smarter travel measures, such as the 'cycling and HGV awareness' campaign will play their part in developing skills and awareness to prevent accidents.

Cycle training also helps to reduce cycling on the footway, which causes concern to pedestrians particularly older and disabled people.

• Free School cycle training

The new three year cycle training contract also includes the majority of funding for school cycle training. These will take the form of group lessons and allow the pupils to potentially progress to Bikeability Level 2.

Priority for these group sessions will be given to schools with up-to-date school travel plans. Linking these two elements should offer double benefits: better skills for young cyclists, and a safer road environment around the schools – with less motorised traffic.

Smarter travel safety initiatives

The smarter travel programme has been devised to work on a number of strands to reduce the number of people injured and killed on our roads. It improves the awareness of dangers, raises skills and encourages the use of sustainable modes to reduce the sources of danger.

The areas of activity range from working with schools through road safety education and school travel plans to the development of work place travel plans. There will also

CASE STUDY 3 – CHANGING PLACES

Background

- Half of all cyclists killed in London involve collision with lorries, even though lorries make up just 5% of London traffic.
- Half of these fatalities happen as the lorry turns left at a junction, trapping the cyclist on the inside.
- H&F officers have launched a cycle/HGV safety initiative based on the suc cessful and award-winning model developed in LB Lambeth.
- Cost of H&F campaign: £15,000
- Average value of prevention per single fatal casualty: £1.64 million

Cyclist education

- Cyclists visit a H&F lorry cab and talk to the driver, then spend 10-15 minutes
 - with a cycling instructor who talks them through, with visual demonstrations, the issues of visibility and correct positioning, blind spots, mirrors
- Pilot event was held at Greenfest in Furnivall Gardens on 20th June
- Events since held on 7th and 16th September 3-6pm on Shepherd's Bush Green
- Further events planned at Parson's Green on 11th and 19th October, and continuing into 2011
- Professional quality photos available from Richard Evans, including of Jeremy Bowen (BBC TV News special correspondent) in and beside the lorry cab

Lorry Driver education

- Cycle training delivered to H&F lorry drivers at Bagley's Road depot
- The first eight lorry drivers took the cycle training day course on Wednesday 22nd September 2010
- All 70 Serco drivers working for H&F to be trained in coming months
- Day starts with a group classroom session in which drivers are encouraged to empathise with cyclists through discussion – a structured, interactive session led by an experienced urban cycle instructor. Drivers have the opportunity to discuss and question how cyclists use/should use the road, with a view to developing a deeper understanding of why they are on the course
- then drivers move outside into the yard to complete national standards training level 1 (off-road)
- then after lunch an introductory session to levels 2 and 3 (i.e. on-road cycle training)
- Fleet manager David Porter was on the first training course

Advertising

- large yellow TfL warning stickers are being affixed to all H&F lorries where possible
- advertising campaign in H&F News 'Never cycle on the inside of a lorry'

be specific road safety campaigns related to evidence-based accident data along with travel awareness campaigns promoting appropriate choices of travel. In addition to our wide range of training we are more than happy to consider mobility training to ensure the blind and the visually and mobility impaired can take advantage of the many transport improvements and opportunities in the borough.

3.11 Programme of Investment

The tables on pages 64 to 67 set out our high level programme of investment for the period 2011/12 to 2013/14. The programme reflects the delivery actions identified in section 3.3, and is focussed on achieving our LIP objectives (and therefore the Mayors Goals for Transport in London) in a cost effective manner. The programme represents the borough's business plan for implementing the changes expressed through the LIP.

We have structured our programme of investment around packages of complementary measures and holistic interventions, in order to maximise the benefits of our investment. The programme has been developed through a multi-disciplinary working party consulting widely with internal and external stakeholders.

Tables 3.3 to 3.5 further illustrate the LIP objectives and MTS goals which each category of investment will contribute towards. Figure B.1 (Appendix B) shows how this investment will contribute to the delivery of each of our LIP objectives.

The programmes represented in this LIP are provisional only and detailed spending profiles will be confirmed in the annual spending submission to TfL. We will maintain some flexibility in our programme to be able to respond to delays and cost over-runs, consultation feedback, new evidence of the impact of previous similar interventions, availability of additional third-party funding and changes in priority. Investment in actual work on the feasibility, design, consultation and implementation of schemes will also be confirmed as part of the annual budget setting process. However our programme management approach is based on the full three years of this LIP, recognising that it is not always feasible or efficient to fund, design and deliver a scheme in one year.

3.12 Investment proposals on the TLRN

Our programme of investment will be supported by the following proposed works on the TLRN, up to and including 2012/13:

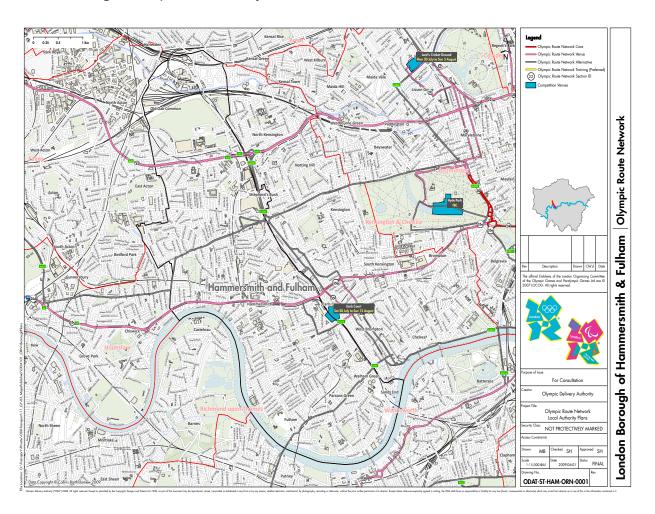
- Improving the pedestrian crossing environment at the junction of Talgarth Road with Gliddon Road and Palliser Road
- Improving the pedestrian and cycling facilities along the A4 Talgarth Road

The following plan shows the various Olympic Route Networks (ORN) in the borough. Two roads are classified as on the Olympic Route Network Venue - Westway and Great West Road (both on the TLRN). In addition to these the following roads on the SRN form part of the alternative Olympic Route Network. They are:

- Goldhawk Road
- Shepherds Bush Green
- West Cross Route (TLRN)
- North End Road (part)
- Lillie Road (part)
- New Kings Road
- Putney Bridge

We shall work with TfL and the ODA to ensure that the approach taken to the ORN is suitable and the mitigation methods acceptable and well publicised to the travelling public.

In July 2010 Earls Court became the Olympic venue for volleyball and will host all matches at the 2012 games. We will work with TfL and the ODA to ensure the venue traffic management plan is robust yet flexible.



3.13 Timetable for delivery

The specific interventions set out in this delivery plan will be delivered by April 2014 unless they are ongoing measures such as those specified in our smarter travel programme. The interventions marked with an asterisk (*) are those considered to be ongoing for the foreseeable future.

The delivery plan will be refreshed every three years - the next time being April 2014.

To comply with the GLA Act 1999 (as amended) the LIP must contain a timetable for implementing each of the different proposed interventions and a date by which all such proposals will be implemented. Where it is possible to provide dates for individual interventions then we will set these out, as well as the date by which they will be implemented. Where this is not practicable we will consider the following approach; where one date by which they will all be implemented is given and those interventions which are on-going clearly indicated.

3.14 Developing the Programme of Investment (POI)

In developing the programme of investment, the cross-divisional working party has:

- Identified delivery actions (section 3.3) which address the delivery requirements for each of the MTS goals (section 2.3):
- Reviewed the strength of evidence (before and after analysis of previous local investment, published research and best practice, stakeholder feedback and professional expertise etc) and prioritised investment in programme areas where there is clear evidence to suggest that the intended outcomes will be delivered and will make a significant contribution to our LIP objectives. For example, figure 3.4 show that our road safety programme of work over the last ten years has delivered some significant benefits in terms of casualty reduction.
- Assessed whether or not there could be any negative impact associated with potential interventions, which need to be mitigated or else balanced against the benefits:
- Structured our programme around packages of complementary measures of holistic interventions, in order to maximise the benefits of our investment with a specific emphasis on growth and employment areas and more deprived neighbourhoods where there is evidence of a need to address safety issues:
- Ensured walking and cycling improvements are incorporated into all packages, where appropriate, recognising the important role these can play in meeting many of our LIP objectives:
- Reviewed our historic patterns of spend against our intended outcomes for the second LIP period and identified:
- a. What additional schemes would be implemented if additional resources were available and what the benefits would be;
- b. What tradeoffs would need to be made if lower levels of investment were available. The POI tables on pages 61 to 65 are prioritised against future potential funding restructures and decreases. This process has been undertaken through the working party involving key transport delivery officers, the results of the first two rounds of consultation and reported to the lead member for environment.
- Considered the scale of change in travel behaviour and transport outcomes required to deliver our LIP targets, set out in Chapter 4. The programme of investment for 2011/12 to 2013/14 is shown on pages 61 to 64. This shall be updated every three years.

3.15 Major Schemes

Our programme of investment includes two proposed major schemes for which we are seeking a funding contribution from TfL; Fulham Palace Road slip road (paragraph 3.15 below) and Goldhawk Road (paragraph 3.6).

The Goldhawk Road Major Project entry in the programme are only aspirational at this stage and although, in principle, TfL are supportive of the initial scheme objectives they have not confirmed the funding needed for implementation.

Fulham Palace Road

The case study below reports the history and details of this major project. We have recently secured £2.76 million to fund the construction of this project from TfL. The funding is in the form of a section 159 agreement rather than major projects funding but the principle of the scheme is that of a major project.

Detailed design is well underway and it is anticipated that consultation will be carried out in May 2011. Construction is likely to follow subject to local support and political approval in July 2011 and to continue for eight months with completion in February 2012.

Goldhawk Road

The case study at paragraph 3.6 on page 35 reports the history and details of the Goldhawk Road major project. In 2009 we were unsuccessful at stage one of our major project funding application and it was this that encouraged us to commission the visioning study that forms the basis of this major project.

The visioning study was carried out using 10/11 integrated transport funding and we have allocated funding in 11/12 to carry out detailed design, start the engagement process with key stakeholders, and deliver some quick wins and to complete and submit a second submission for major projects funding.

We have anticipated that £3 million of major project funding is required, profiled over 12/12 and 13/14 which will be topped up with £2 million of developer funding. Given the regeneration in the area, with the White City Opportunity Area (and other development sites), we are confident that this funding is achievable over the project timescales.

Construction is indicatively planned for after the London 2012 Olympics, as Goldhawk Road is part of the Olympic Road Network, and to be completed by 2013/14.

• Future major projects

Fulham palace Road and Goldhawk Road are the only two major projects identified in the programme of investment period, up to 2013/14. We anticipate that during the life of this plan (to 2031) additional major projects will be devised and submitted for funding through the three yearly programme of investment.

3.16 Risk Management

Every programme and individual scheme, regardless of size, will have risks and issues associated with actually doing the work. For this, a robust LIP, it is vital that all risks are recognised and managed to minimise problems and maximise the chances of success.

We consider effective risk management to be an established, but vital, process and an essential ingredient of a good LIP programme and scheme management. A structured methodology has therefore been developed to identify, assess, mitigate and manage potential risks throughout the lifecycle of the LIP programme.

The methodology is based on three key stages:

• The identification of risks, opportunities and uncertainties at both scheme and programme level

- Risk quantification and analysis for decision support
- Ongoing reporting and review.

The primary objective of this methodology is to assist the scheme and programme teams to focus their skills on the areas of uncertainty, thus reducing or avoiding the impacts of risk and allowing them to exploit opportunities for cost saving.

Individual scheme and policy risks

Risk is managed on an individual scheme basis through our BSI registered quality management system (QMS), with the level of information recorded on the scheme quality plan proportionate to the size and complexity of the risk and mitigation.

Within the QMS is an established and bespoke road safety audit protocol which is applied to every project that seeks to amend the layout of the road network. It was developed using the principles of statutory requirements for road safety audit for the trunk road network and regional guidance from TfL. By carrying out this protocol we can ensure that all our highway improvement projects seek to improve road safety in line with our national and local casualty reduction targets.

A departmental risk register is prepared and updated annually as part of our business planning process and identifies any other business risk that may affect scheme delivery.

Programme level risks

The table below identifies a range of common risks and mitigation measures relating to the delivery of the overall LIP programme, and the achievement of outcomes.

As part of our risk assessment process, programme delivery is monitored at monthly meetings with all programme managers and senior management in the highways and transport division. This is in order to identify and resolve any problems as soon as they occur. If it becomes apparent that there are significant risks to timescales and/or costs, it is possible to re-prioritise design work so that abortive costs are minimised.

* Bespoke policy compliance tool

Given the change in nature of project input a matrix based tool has been developed to ensure that design proposals are meeting the boroughs transport objectives and also the Mayors goals and high level outputs. The tool is based on the councils EIA screening matrix (and SEA screening matrix) and lists the objectives (and goals) and assesses the impact of scheme designs on each one as positive, negative or neutral.

This matrix is presented to the lead member as part of the poitical approval process for Lip funded schemes and allows a considered political decision and to understand and resolve any conflicts.

Major scheme proposal 1 – Fulham Palace Road

Fulham Palace Road (A219) is a key north-south route which forms part of the Strategic Highway Network. There are significant traffic queues currently along the whole road, particularly during the peak periods, which extends along its whole length from Hammersmith Gyratory to Putney Bridge in the south.

Prior to the implementation of the congestion charging extension in February 2007, members and officers met with TfL to discuss the likely effect on the borough's roads. In particular, increased congestion on the Borough's already congested north south corridors was considered critical.

The extension of the congestion charging area has had an impact upon Hammersmith & Fulham, as the Western Extension Zone (WEZ) boundary lies directly along the borough boundary in this area.

As a result of these changes Putney Bridge leads traffic directly onto the New Kings Road and the A3212 rerouting traffic to avoid the charging area.

Fulham Palace Road runs north-south parallel to the charge boundary and therefore has attracted traffic wishing to avoid the charge area.

The TfL congestion charge director advised that to get a review of Fulham Palace Road, the borough should seek funding through individual TfL programme managers. Bus priority was thought the most likely source of funding as the Route 220 (Wandsworth to Willesden) service was due for review through Third Generation Bus Priority Programme (3GBP) funding.

TfL agreed to fund the initial appointment of consultants to undertake a feasibility study of potential capacity improvements along Fulham Palace Road. From the consultant's initial investigations, traffic modelling and peak hour traffic observations on site, a number of sites were identified as problematic along Fulham Palace Road. The council decided that the Fulham Palace Road slip road proposal/carriageway reconfiguration was identified as the priority scheme because it seemed to deliver the most benefits.

However, due to the sensitive location of the proposal as well as the predicted high costs of the scheme (estimated at £1.5m at the time), VISSIM modelling of the gyratory including all the approach roads (the recognised software for testing traffic schemes in congested traffic areas), was required for TfL to assess the effect on the gyratory as well as the development of a full business case for funding by TfL.

In order to test the impact of the proposed improvement measures, specialist consultants, together with Transport for London and H&F officers have developed two traffic models using VISSIM. These models cover not only Hammersmith Gyratory and its approaches, but also Hammersmith Bridge Road and the nearby Castelnau / Lonsdale Road junction in the London Borough of Richmond.

The first traffic model prepared was the base and is largely complete - it represents the existing traffic conditions during the peak daytime periods. The second models the improvement measures and is also nearing completion.

Recent results show significant benefits are being achieved in comparison to the existing situation, in terms of reduced journey times for buses and general traffic in the area.

Meighbourhoods and Corridors

Incastion O 150 17 167 N N N N N N N N N														7
LIP allocation 0 150 17 16	2,3,4,5,7	2,3,4,5,7	3,4,5,7	3,4,5,7	3,4,5,7	3,4,5,7	3,4,5	4, 5,	2,	2,	5,	٦,	ر,	2, 3, 4, 5,
and LIP allocation 0 150 17 167 7 7 LIP allocation 0 190 18 208 7 7 sability, LIP allocation 0 180 17 197 7 7 sility, LIP allocation 0 0 120 120 7 7 7 bility, LIP allocation 0 0 130 130 7	7, 10, 12, 13, 15, 16, 18, 23, 24	7, 10, 12, 13, 15, 16, 18, 23, 24	7, 10, 12, 13, 15, 16, 18, 23, 24	7, 10, 12, 13, 15, 16, 18, 23, 24	7, 10, 12, 13, 15, 16, 18, 23, 24	7, 10, 12, 13, 15, 16, 18, 23, 24	7, 10, 12, 13, 15, 16, 18, 23, 24	7, 10, 12, 13, 15, 16, 18, 23, 24	7, 10, 12, 13, 15, 16, 18, 23, 24	1, 4, 5, 10, 14, 18, 19, 23, 24	1, 4, 5, 10, 14, 18, 19, 23, 24	1, 4, 5, 10, 14, 18, 19, 23, 24	1, 4, 5, 10, 14, 18, 19, 23, 24	1, 4, 5, 10, 14, 18, 19, 23, 24
and LIP allocation 0 150 17 167 % trs LIP allocation 0 190 18 208 % % trs LIP allocation 0 190 18 208 % % sability, LIP allocation 0 120 120 % % sility, LIP allocation 0 0 130 130 % % nd LIP allocation 0 0 140 140 % % ren, LIP allocation 60 60 60 180 % % restrian LIP allocation 15 15 45 % % ving LIP allocation 45 45 % % % to 10 10 140 140 % % % rent LIP allocation 15 15 45 % % rent L	7	7	7	7	7	7	7	7	7	7	7	7	7	>
and LIP allocation 0 150 17 167 C trs LIP allocation 0 190 18 208 C trs LIP allocation 0 190 18 208 C sability, all pallocation 0 180 17 197 C bility, all pallocation 0 0 130 130 C and LIP allocation 0 0 140 140 C ren, all trs, and allocation 175 175 175 525 C ss LIP allocation 45 45 C to LIP allocation 15 15 45 C to LIP allocation 36 36 36 108 C	7	7	7	7	7	7	7	7	7	7	7	7	7	>
and LIP allocation 0 150 17 167 LIP allocation 0 190 18 208 Lists LIP allocation 0 190 18 208 Lility, Lip allocation 0 180 17 197 and LIP allocation 0 0 130 130 and LIP allocation 0 0 140 140 ren, LIP allocation 0 0 140 140 ss LIP allocation 175 175 525 estrian 15 15 15 45 to LIP allocation 45 45 15 to LIP allocation 36 36 108 7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
and LIP allocation 0 150 17 167 trs LIP allocation 0 190 18 208 trs LIP allocation 0 180 17 197 sability, Lip allocation 0 0 120 120 bility, Lip allocation 0 0 130 130 and LIP allocation 0 0 140 140 ren, LIP allocation 0 0 140 140 restrian LIP allocation 175 175 525 estrian LIP allocation 15 15 45 to LIP allocation 45 45 135 to LIP allocation 36 36 108 108	7	7	7	7	7	7	7	7	7	7	7	7	7	7
and LIP allocation 0 150 17 trs LIP allocation 0 190 18 eability, Lab allocation 0 180 17 bility, LIP allocation 0 0 120 and LIP allocation 0 0 130 and LIP allocation 0 0 140 ren, LIP allocation 0 0 140 ren, LIP allocation 175 175 175 sstrian LIP allocation 15 15 15 to LIP allocation 45 45 45 to LIP allocation 36 36 36														7
and LIP allocation 0 150 trs LIP allocation 0 190 trs LIP allocation 0 190 tility, LIP allocation 0 0 180 bility, LIP allocation 0 0 0 and LIP allocation 0 0 0 ren, LIP allocation 60 60 ren, LIP allocation 175 175 sss LIP allocation 15 15 to to tr and LIP allocation 36 36	167	208	208	197	120	130	130	06	140	180	525	45	135	108
and LIP allocation 0 LIP allocation 60 ren, LIP allocation 60 LIP allocation 175 estrian LIP allocation 15 ss LIP allocation 45 to to to the stand LIP allocation 36 read LIP allocation 36	17	18	18	17	120	130	130	06	140	09	175	15	45	36
and LIP allocation LIP allocation LIP allocation LIP allocation LIP allocation and LIP allocation	150	190	190	180	0	0	0	0	0	09	175	15	45	36
and tris tris illity, billity, and control of the c	0	0	0	0	0	0	0	0	0	09	175	15	45	36
and tts tts and and bility, and cen, cen, ss ss ss to	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation
Smarter Travel Smarter Travel Cac a Cat The add Core	Du Cane Road Neighbourhood - Encourage more walking through legibility, permeability, and accessibility improvements. Public realm and environmental improvements	Riverside Neighbourhood - Encourage more walking through legibility, permeability, and accessibility improvements. Public realm and environmental improvements	Fulham Palace Road (East) Neighbourhood - Encourage more walking through legibility, permeability, and accessibility improvements. Public realm and environmental improvements	Charing Cross Hospital Neighbourhood - Encourage more walking through legibility, permeability, and accessibility improvements. Public realm and environmental improvements	St. Mary's Cemetery Neighbourhood - Encourage more walking through legibility, permeability, and accessibility improvements. Public realm and environmental improvements	Hammersmith Grove Neighbourhood - Encourage more walking through legibility, permeability, and accessibility improvements. Public realm and environmental improvements	Sulgrave Road Neighbourhood - Encourage more walking through legibility, permeability, and accessibility improvements. Public realm and environmental improvements	White City Neighbourhood - Encourage more walking through legibility, permeability, and accessibility improvements. Public realm and environmental improvements	Cathnor Park Neighbourhood - Encourage more walking through legibility, permeability, and accessibility improvements. Public realm and environmental improvements	Cycle Training - facilitate cycling skills and build confidence through cycle training for children, adults and all-ability cyclists	Children's education, training and publicity – a range of activities targeted at child Moving on, Roadwise Rangers, Junior Citizens, School Travel Plans, School grants, training, Walk on Wednesdays and Walk to School Week.	Cycling awareness campaigns - concentrating on the continuing Cycling and HGV awareness programme	General Campaigns - a range of education, training and publicity including:- drink/drug driving awareness, in car safety, theatre in education, Powered 2 wheelers, and Road safety linked to health improvements	Travel awareness - promoting sustainable travel through Workplace Travel Plan development and Travel awareness promotion

	2, 3, 4, 5, 7														-	2, 3, 4, 5, 7	2, 3, 4, 5, 7	
	4,5, 6, 7, 10, 12,	15, 20, 21, 23, 24														1, 2, 3, 4, 5, 6, 7, 9, 10, 12,13, 14, 15, 16, 18, 20, 21, 22, 23, 24	1, 2, 3, 4, 5, 6, 7, 9, 10, 12,13, 14, 15, 16, 18, 20, 21, 22, 23, 24	
	>															7	7	
	7															,	,	
	7	_	_	_	_	_	_	_	_	_	_	_	_			7	?	
	7															7	2	
6490	245	119	91	114	105	125	240	210				1500	220	871	3840	2300	3000	2300
2164															0		2000	2000
2164				114	105	125	240	210	350			200			1644		1000	1000
2162	245	119	91						200	275	275	1000	220	871	3596	2300		2300
	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LIP allocation	LOBEG	LOBEG	LOBEG	LOBEG	LIP allocation	LIP allocation		TfL Business Plan	LIP allocation	
Integrated transport total	Scheme 1 - Goldhawk Rd			Scheme 4 - Hammersmith Road 2		Scheme 6 - Lillie Road 1	Scheme 7 - Lillie Road 2	Scheme 8 - New King's Road	Bridge assessment and strengthening - Hammersmith Bridge	Bridge assessment and strengthening - North End Road Bridge	Bridge assessment and strengthening - Lillie Road Bridge	Bridge assessment and strengthening - Scrubs Lane Bridge	AIMS	Road 2000		Fulham Palace Road Slip Road - To develop how the extensive road space can be best used to stimulate regeneration & inclusivity e.g. improve public realm using better streets principals. Fulham Palace Rd is a key north-south route as well as a busy bus corridor	Goldhawk Road Package - From commissioned multi modal transport study to develop how the extensive road space can be best used to stimulate regeneration & inclusivity e.g. improve public realm using better streets principals	
itegr			əɔ	u	eu	əţ	uį	ьN	V							səmər	Major Scl	

Programme risks and mitigation measures						
Risk	Mitigation measure(s)					
Cost increase/budget reduction	all designs developed to be flexible to allow amendments to reflect budget reduction whilst still maintaining principles of LIP objectives					
Delay to schemes	LIP funding to be allocated in consecutive years to allow more involved projects to be run over 18 months rather than the traditional 12 months					
Lack of Stakeholder support	develop designs that meet our LIP objectives that can be justified and presented to stakeholders in a suitable manner					
Policy compatibility	to develop a bespoke policy compliance tool* that all potential projects will be assessed against					
Lack of resources to deliver	to maintain our working relationships with the RB Kensington & Chelsea and framework consultants to ensure resources are in place to deliver LIP objectives.					