

PROPOSED FINAL

**HARROW TRANSPORT
LOCAL IMPLEMENTATION PLAN**

2011/12 – 2013/14

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1. Introduction

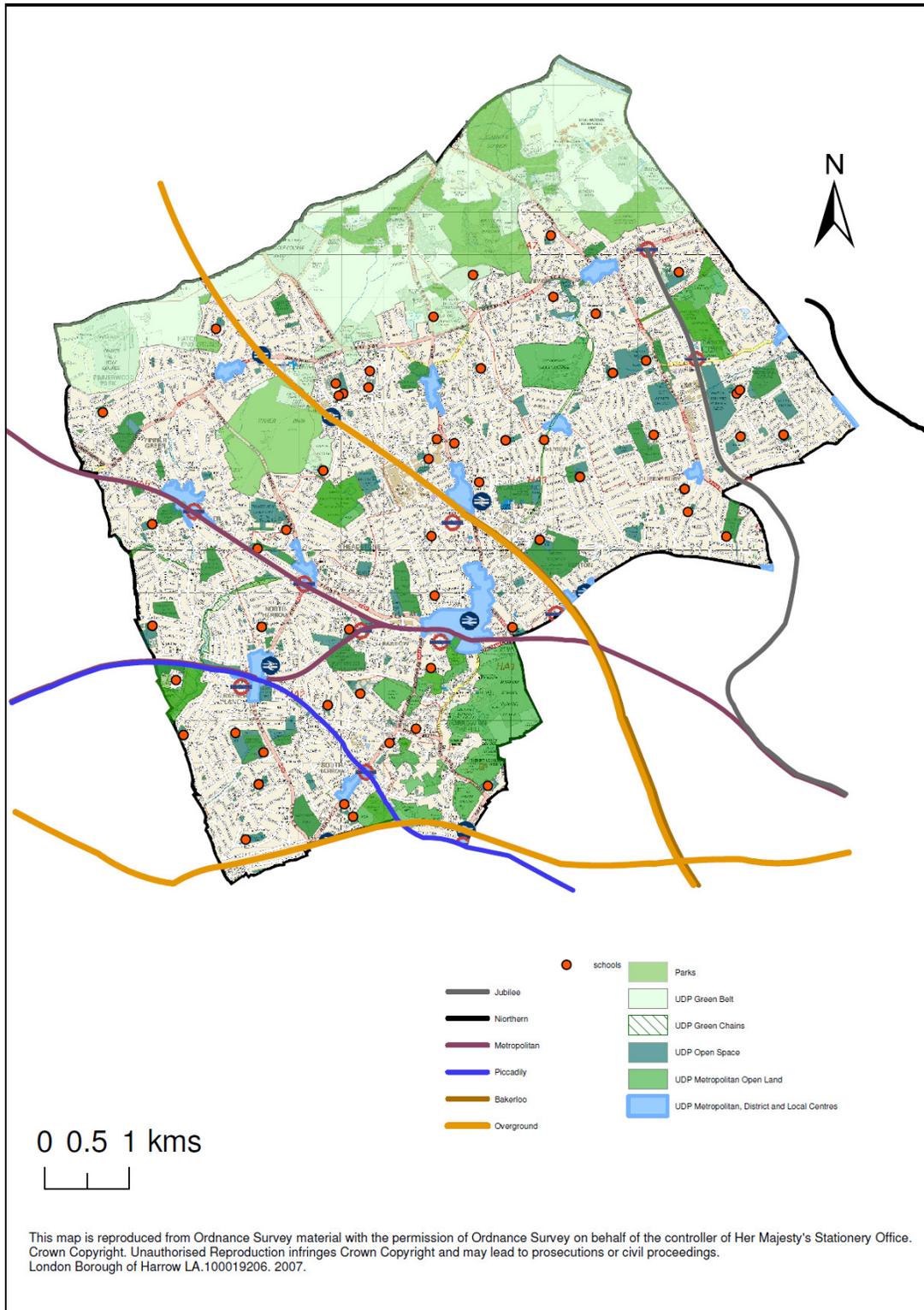
1.1 Background

- 1.1.1** A Local Implementation Plan (LIP) is a statutory document, prepared under Section 145 of the Greater London Authority Act 1999. The document is required to set out how the borough proposes to implement the Mayor of London's Transport Strategy at the borough level, as well as how the borough will achieve other locally and sub-regionally important goals. Harrow's first Transport LIP, which was published in response to the first Mayor of London's transport strategy, covered the period 2005/06 to 2010/11. Harrow's second Transport LIP covers the period 2011 and beyond and includes a detailed programme of investment for the period 2011/12 – 2013/14. It is Harrow's response to the new Mayor of London's Transport Strategy, published in April 2010. Harrow's new transport LIP also provides more detailed information to support the Harrow Sustainable Community Strategy (SCS), Harrow's Local Area Agreement and other relevant monitoring data.
- 1.1.2** This document sets out Harrow's transport objectives and policies and also provides Harrow's plans for meeting these objectives, a three year programme of investment and the targets and outcomes we are seeking to achieve.

1.2 Harrow Overview

- 1.2.1** Harrow is an outer London Borough in the northwest of the capital.
- 1.2.2** Over a quarter of the borough (over 1,300 hectares) consists of open space. The entire borough covers an area of approximately 50 sq. km (just under 20 square miles). See Figure 1-1: Harrow Metropolitan areas, town centres, district centres.
- 1.2.3** The borough has 21 wards. In the last election, the Labour party gained overall control of Harrow Council with 34 seats out of 63.
- 1.2.4** Compared with other outer London Boroughs, Harrow has a relatively small amount of land and buildings devoted to employment and industrial activity.
- 1.2.5** The borough is famous for the quality and quantity of green belt land in the borough. This provides access to nature and recreation for many local people, complementing the borough's range of parks and open spaces.
- 1.2.6** Outside the green belt, Harrow is intensively built up with little vacant, undeveloped or under-developed land. Harrow has a continuing need for more homes, partly to meet the needs of the increasing population and partly due to the increase in the number of households. This pressure for housing is challenging the traditional character of parts of the borough.
- 1.2.7** Harrow Town Centre is one of the ten metropolitan retail centres in London.
- 1.2.8** The borough has good public transport links into the centre of London and excellent road links to the rest of the country.
- 1.2.9** Harrow is unique in London, in that none of the roads in the borough are part of the Transport for London Road Network (TLRN).
- 1.2.10** Harrow has the overall lowest crime rate in London as measured by crime per 1,000 population.
- 1.2.11** Harrow and Wealdstone is an area of intensification as defined in the Mayor's London Plan. This offers significant opportunity for urban renewal and intensification, providing the impetus to regenerate Wealdstone and rejuvenate Harrow town centre.

Figure 1-1: Harrow Metropolitan areas, town centres, district centres and schools



1.3 Harrow People

- 1.3.1 Harrow has an estimated population of about 228,000.
- 1.3.2 The most distinctive aspect of Harrow is its ethnic and religious diversity, with 50.1% of the people living in the borough being from minority ethnic groups.
- 1.3.3 Harrow is made up of people from at least 137 different countries and, based upon the seven religions listed in the standard tables from the census, it has the highest level of religious diversity of any local authority in England and Wales.
- 1.3.4 Harrow has a modestly increasing population including a growing number of older people and a richly diverse and changing child population. There has been a disproportionately high increase in the number of older people and adults living alone.
- 1.3.5 Harrow's overall health indicators are good and people born in Harrow can expect to live longer than the London and England averages. However, Harrow does have areas of relative deprivation with residents who have serious health needs.
- 1.3.6 The biggest killers in Harrow, accounting for over half of all deaths, are circulatory diseases and cancers. Diabetes, stroke and airways disease are also seen more frequently in Harrow than the average for England.
- 1.3.7 For the period 2004 to 2006 the average life expectancy for men in Harrow was 78.9 years and 83.1 years for women. This was the third highest life expectancy for men and fourth highest in women in North West London and higher than average for England (male life expectancy 78.1 years and women 82.6 years). However, there are wide inequalities in health within Harrow. For the period 2001-2005, at ward level, male life expectancy varied by 6 years between Wealdstone, the ward with the lowest life expectancy at 75 years and Pinner South which had the highest life expectancy at 81 years. For women, the highest life expectancy was 87.9 years in Pinner South and this was 8.6 years more than the life expectancy in Wealdstone where the average female life expectancy was 79.3 years. The wards making up the central corridor and southern parts of Harrow tended to experience the lowest life expectancy for both men and women.
- 1.3.8 Harrow has approximately 7,000 people with some form of learning disability. There are still a significant number of people with learning disabilities who are not known to any services. In 2007, 415 adults under the age of 65 were receiving community based services for people with physical disabilities and sensory impairment, as compared to nearly 2000 in those aged 65 years and over.
- 1.3.9 Infant mortality rates and the number of low birth weight babies are also higher in Harrow than the average for England.

1.4 Harrow's Economy

- 1.4.1 Harrow has an above average standard of living and low unemployment.
- 1.4.2 The borough is a largely commuting/freelancing borough with high levels of employment within the London region but with a significant range of employment in local businesses with regional as well as local markets.
- 1.4.3 61.8% of residents work outside of the borough, in particular in other parts of West London and central London where opportunities are greater.
- 1.4.4 Employment levels and household earnings are currently relatively high, although there are 8,870 people receiving either incapacity benefits or job seeker's allowance.

- 1.4.5** The relative affluence has meant larger number of cars, with associated challenges to traffic, air quality, personal health, and physical activity.

1.5 Transport in Harrow

- 1.5.1** Harrow sits within the West London sub-regional partnership with Hillingdon, Ealing, Brent, Hounslow and Hammersmith and Fulham. TfL has been working closely with the Greater London Authority (GLA), the London Development Agency (LDA) and London boroughs in developing an integrated approach to sub-regional transport and land-use planning. The West London sub-regional team have developed a 10-point transport plan for West London. West London sub-regional partnership also addresses issues relating to Heathrow airport which is a destination for more than 45,000 trips daily by London residents, of which over half are made by car. Although Harrow is concerned with links to Heathrow airport it is not the main issue for the borough. See Figure 1-2: West London sub-regions.
- 1.5.2** Harrow is well served by public rail transport, with 4 underground lines, the Metropolitan, the Bakerloo, the Jubilee and the Piccadilly lines and overground railways connecting the borough with Clapham Junction, London Euston and London Marylebone stations to the south and Watford, Aylesbury & Birmingham to the north. There is also a comprehensive network of bus services in the Borough, with around 37 bus routes including five night bus services. See Figure 1-3: Transport in Harrow - Rail, Underground and Road. The central part of the Borough, particularly around the centres of Harrow and Wealdstone has the highest public transport accessibility level (PTAL) for the Borough. See Figure 1-4: Harrow Public Transport Accessibility Level map.
- 1.5.3** The borough is effectively surrounded by high capacity trunk roads. The M40 and M4 are close to the southern boundary, and the M1, A1 and A41 are close to the northeast corner. The M25 provides the major orbital route to the north and west while the A406 North Circular Road is to the southeast. However, the Borough itself is characterised by the absence of trunk routes or Transport for London Road Network (TLRN). See Figure 1-5: Roads surrounding Harrow.
- 1.5.4** There are 41 km of cycle lane in the borough. These have been introduced to link key trip generators and places of interest such as stations, shopping areas, schools, open spaces etc. See Figure 1-6: Harrow cycle routes.
- 1.5.5** Car ownership in Harrow is high and certainly increased because of the geographical location of the borough on the outskirts of London. Based on the 2001 Census, 23% of all households have no car or van and 33% have 2 or more cars or vans. The percentage of households with no car or van is not only lower than all London Boroughs bar Hillingdon, but is in fact lower than all of England and Wales where 27% have no car or van. (The number of households with no car or van in all of London is 37%). Harrow is also the Borough with the second highest percentage of households owning two or more cars. As a result of this, encouraging drivers to change their mode of transport to a more sustainable form of transport is extremely challenging.
- 1.5.6** Harrow Town Centre is a metropolitan centre and a place of sustainable growth. It is one of London's ten largest retail centres, a busy commercial centre, and a major public transport hub. Consequently, transport provision to the centre is a key priority for the Borough. The lack of accessibility at Harrow on the Hill the station is a major concern which impacts on those with mobility problems throughout West London.

1.5.7 Table 1-1: Transport networks of concern identifies the key origin/destination, multi-modal transport corridors and interchanges between networks in the borough.

Table 1-1: Transport networks of concern

	Key Origin / Destinations	Multi-Modal Transport Corridors	Interchanges between networks
London-wide	Bentley Priory Harrow on the Hill school North London Collegiate school Harrow skatepark	Rail Wealdstone - Euston Watford - Euston Chiltern Railways Aylesbury Vale Parkway to London Marylebone Stratford upon Avon to London Marylebone Kidderminster – Birmingham Snow Hill – London Marylebone Roads Motorway M1 Uxbridge Road A410, A404 George Gange Way A404 Pinner Road A404 Burnt Oak Broadway A5	Train/Underground Watford Euston rail to Bakerloo line underground all stations from Harrow and Wealdstone to Queens Park Harrow on the Hill underground to Chiltern Railways Major roads All A road junctions
Sub-Region (e.g. South)	Metropolitan town centres – Harrow town centre Major Shopping Centres – Harrow town centre, Wealdstone Key sub-regional services – University of Westminster at Harrow Khristna Avanti Hindu school Royal National Orthopaedic Hospital Stanmore Country Park Grimsdyke Hotel Harrow-on-the-Hill village Pinner village Harrow museum and heritage centre	Sub-regional strategic transport corridors Rail Wealdstone - Euston Watford - Euston Chiltern Railways Aylesbury Vale Parkway to London Marylebone Stratford upon Avon to London Marylebone Kidderminster – Birmingham Snow Hill – London Marylebone Underground Jubilee, Metropolitan and Piccadilly and Bakerloo underground lines Walking routes Capital ring goes across north of borough London Loop goes through Harrow on the Hill Roads Honeypot Lane A4140 Alexandra Avenue A4090 Northolt Road A312 Sudbury Hill A4005	Train/Underground Station Harrow on the Hill Harrow and Wealdstone Underground Rayners Lane Bus/Underground Harrow on the Hill Major road junctions All A road junctions

	Key Origin / Destinations	Multi-Modal Transport Corridors	Interchanges between networks
		Bessborough Road A312 Oxhey Lane A4008 Sheepcote Road A4090	
Local	<p>Local Town Centres – Stanmore, Edgware, Burnt Oak, Queensbury, Kingsbury, Belmont Circle, Harrow Weald, Kenton, Hatch End, Pinner, North Harrow, Rayners Lane, South Harrow, Sudbury Hill, Wealdstone</p> <p>Major Employers - Harrow Council, the Royal National Orthopaedic Hospital, Bovis Lend Lease Ltd., and Ladbrokes Ltd.</p> <p>Preferred industrial location Wealdstone Industrial area</p> <p>Industrial business park Honeypot Lane – Stanmore,</p> <p>All health centres, schools, district centres</p>	<p>Complete cycle network/road network/ bus network</p> <p>Key Walking routes Harrow area of Intensification</p>	<p>All Local Underground Stations</p> <p>All Local Railway Stations</p> <p>All Local Road</p> <p>All Bus Stops</p> <p>Entire cycle network</p> <p>All Kerbside</p>

Figure 1-2: West London sub-regions

West London Sub-Region

December 2009

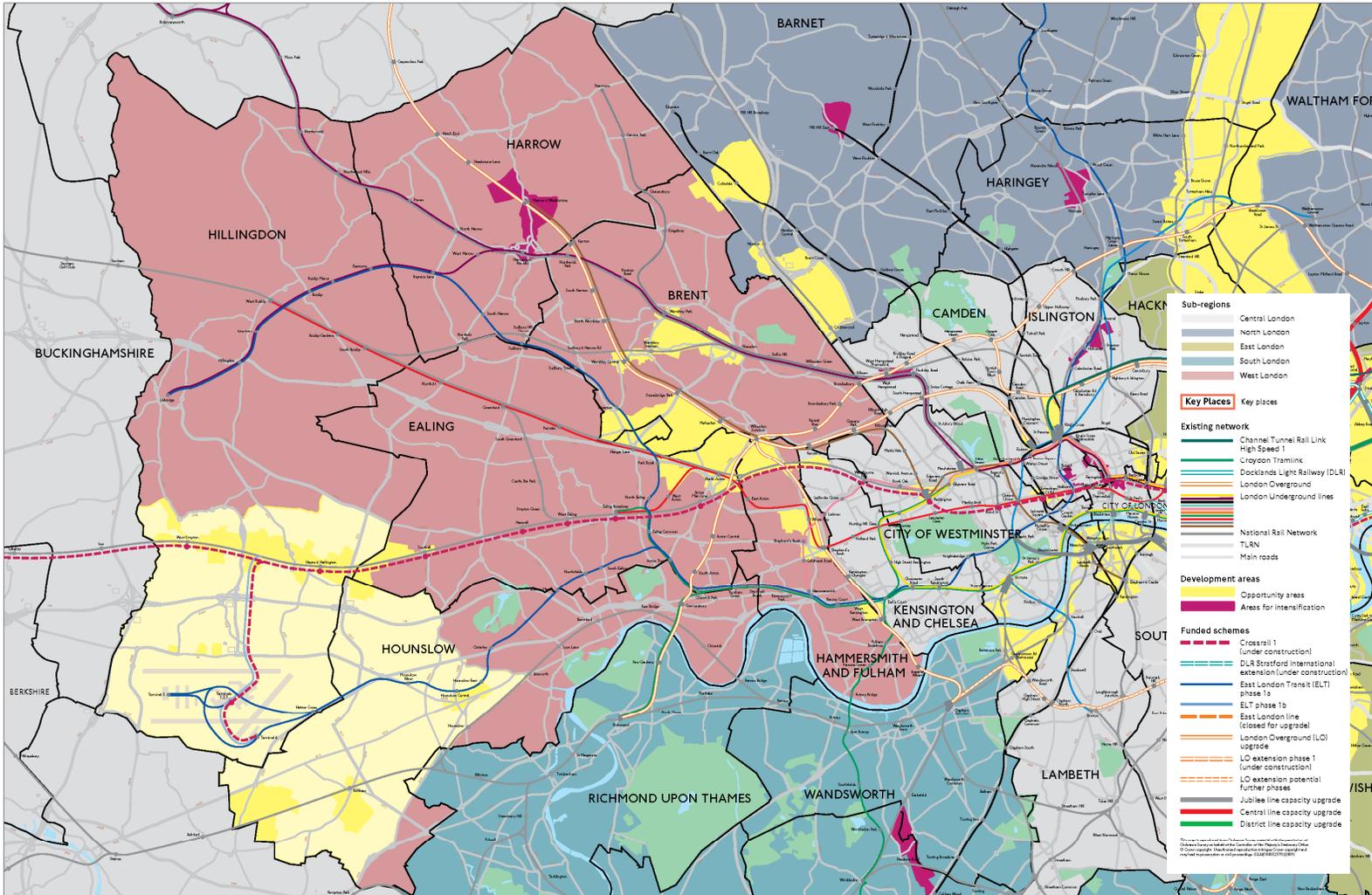
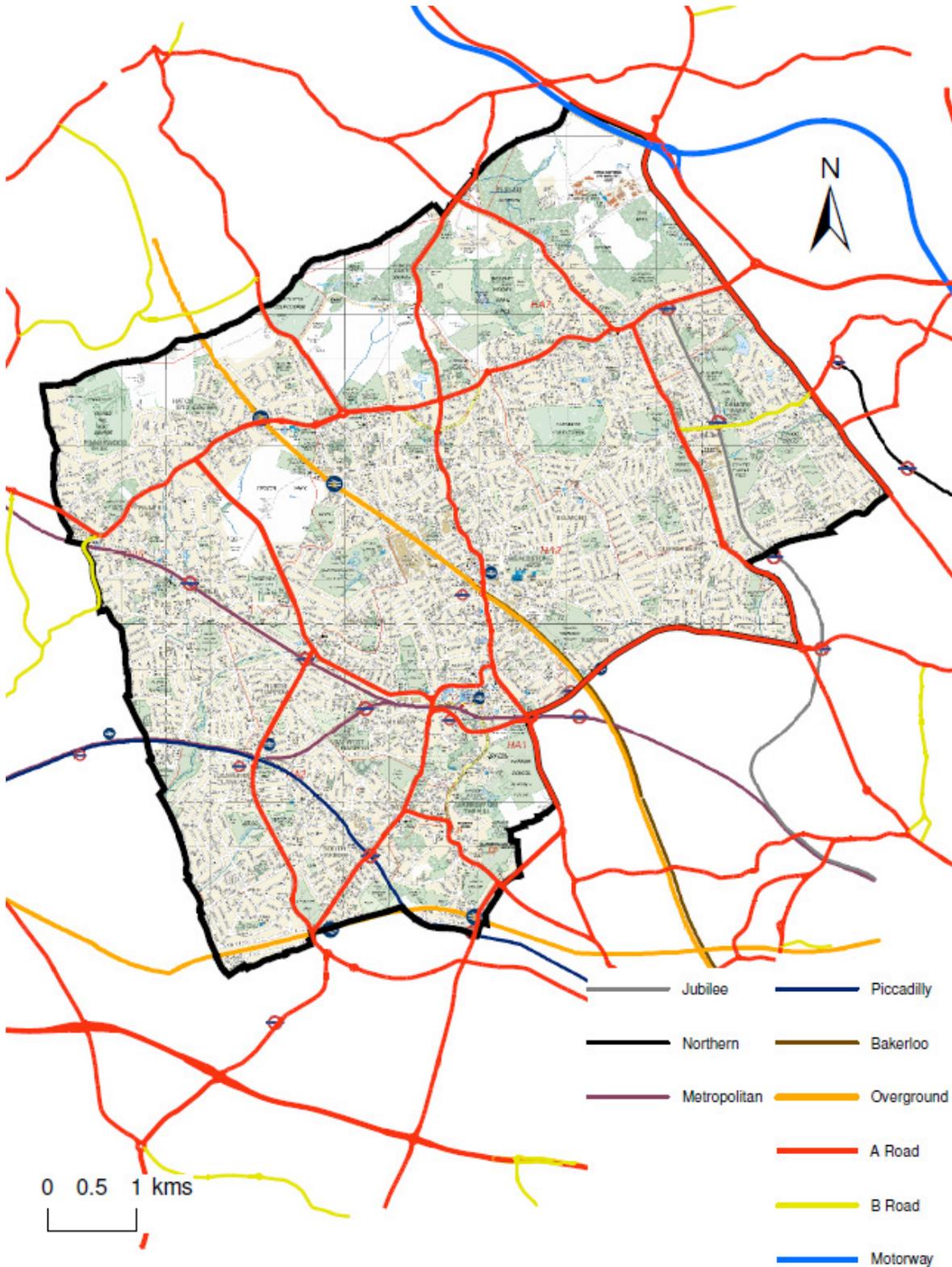


Figure 1-3: Transport in Harrow - Rail, Underground and Road

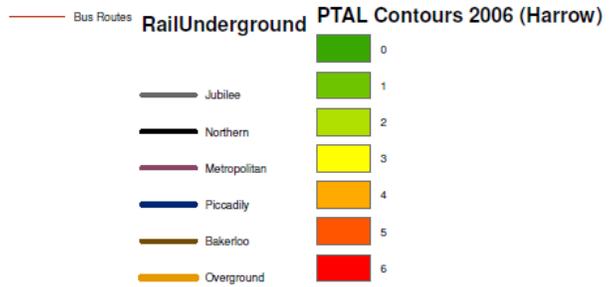


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Figure 1-4: Harrow Public Transport Accessibility Level map



Legend



0 0.5 1 kms


Figure 1-5: Roads surrounding Harrow

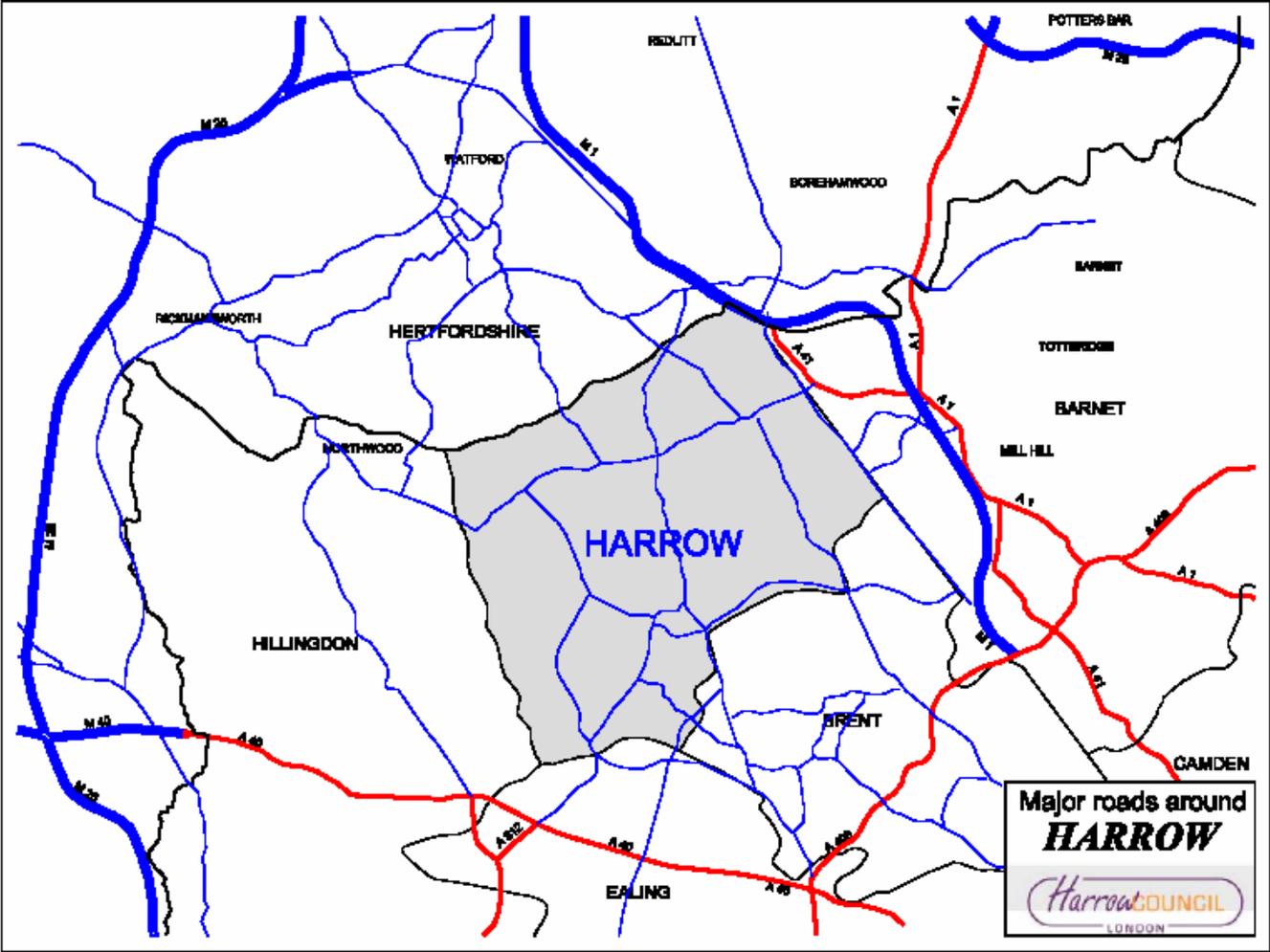
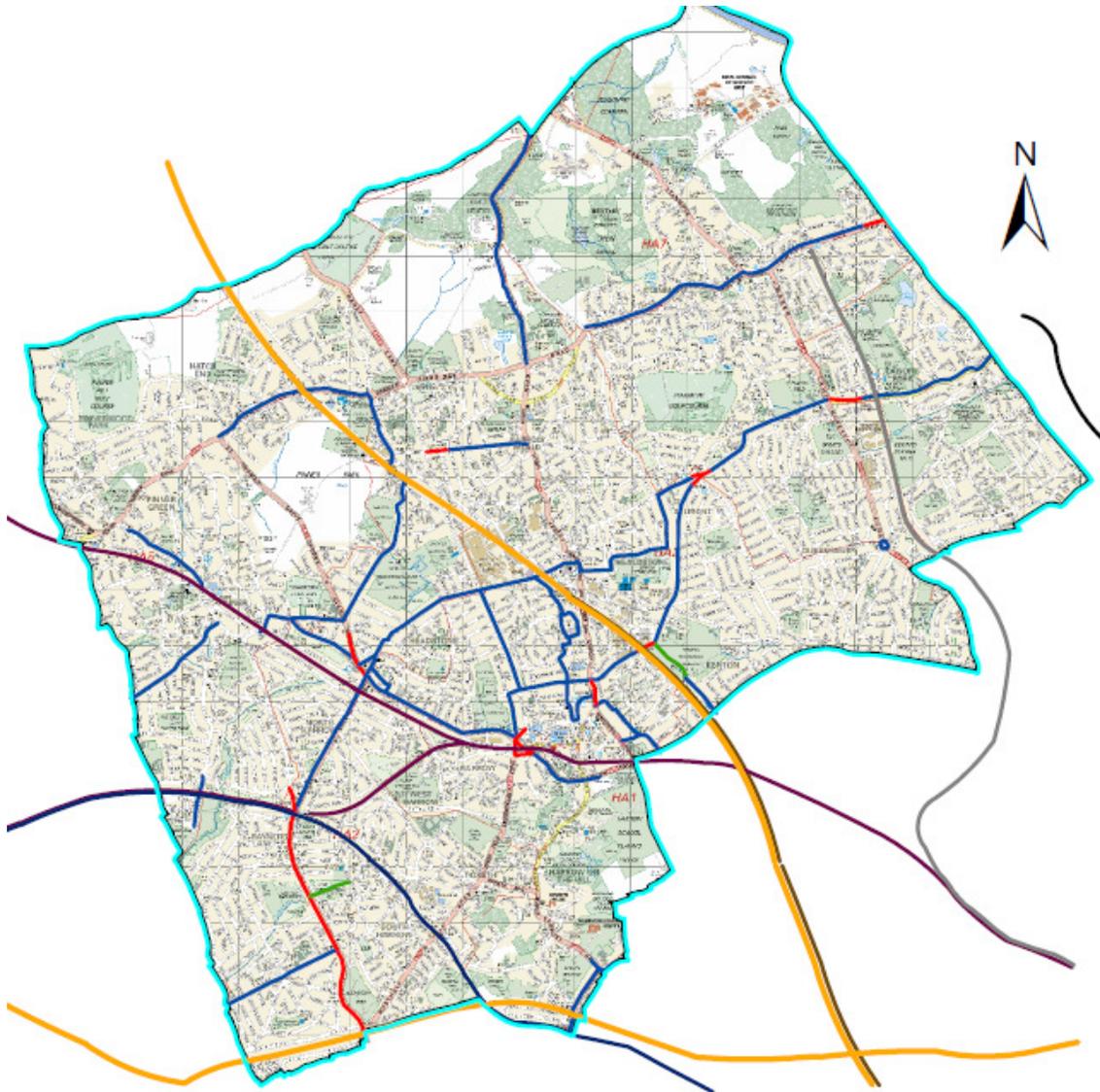


Figure 1-6: Harrow cycle routes



0 0.5 1 kms

- | | | |
|-------------|--------------|-------------------------------|
| Rail | Metropolitan | Overground |
| Jubilee | Piccadilly | cycle_routes |
| Northern | Bakerloo | On Road cycle lane |
| | | Off Road cycle lane |
| | | Cycle lane through open space |

DIGITAL MAP DATA (C) COLLINS BARTHOLOMEW LTD (2007)

1.6 Harrow LIP development and structure

Harrow's second Transport Local Implementation Plan has been developed in accordance with the Guidance on Developing the Second Local Implementation Plans issued by the Mayor of London in May 2010.

1.6.1 Policy influences

In preparing LIP2 the Council has needed to consider local, London-wide, sub-regional and national policy.

Key **national policy** influences considered include:

Transport Act 2000 (as amended)

Transport White Paper – Developing a Sustainable Transport System

Educations and Inspections Act 2004

Key **London-wide policy** influences considered include:

Mayor's Transport Strategy – October 2009

- Mayoral goals

London Plan draft 2009

- Area of Intensification: Harrow and Wealdstone

London Economic Development Strategy

Mayor's Public Realm Vision

Mayor's Air Quality Action Plan

Sub-regional policy influences considered include:

West London Partnership 10 point plan 2008

WEST LONDON, Developing a Sub-regional Transport Plan – Interim report on challenges & opportunities – February 2010

- Improve north-south connectivity – *particularly influenced Harrow's objective 2 regarding linking orbital transport*
- Improve access to, from and within key locations – *this compliments the Mayor's goal of improving connectivity and has also influenced objective 2*
- Enhance east-west capacity and manage congestion – *East-west capacity is not a major issue for Harrow though managing congestion is and this has influenced objective 10*
- Enhance the efficiency of freight movements in the sub-region – *this compliments the Mayor's challenge of delivering an efficient and effective transport system for people and goods. Harrow has considered this by enabling an efficient freight delivery service in the borough through improved signage and loading bays and liaising with key industrial estates in the borough*
- Improve land-based air quality – *this compliments Harrow's objective 4*

Key **local policy** influences considered include:

Harrow Core Strategy preferred option consultation November 2009

- Major trip generating development to be supported by deliverable Travel Plans giving consideration to the establishment of car clubs and electric car charging stations.
- Central Harrow to continue to be the public transport hub serving the districts and suburbs throughout the rest of the Borough.
- Special attention to be given through masterplanning and the production of an Area Action Plan to the Intensification Area to the improvement of Station Road as a public transport corridor linking Harrow-on-the-Hill and Harrow & Wealdstone stations, and to environmental enhancements which encourage walking and cycling.

Harrow sustainable community strategy (SCS) – March 2009

- An improving environment with better access to transport; where the car is not necessarily the preferred choice of transport and there are attractive, accessible and sustainable alternatives; where new developments are aligned with transport routes and transport routes are aligned with existing high density developments; where there is easy and convenient access to footpaths, cycle paths and public transport
- Health, well being and independence through support for personal mobility for vulnerable people.
- Economic development of Harrow supported by Harrow being an attractive place to work and set up business and Harrow's public transport infrastructure providing access to employment opportunities beyond the borough; promoting the regeneration of Harrow Town Centre and securing a 21st century transport hub.
- Children and young people are healthy and safe
- A diverse community, which we celebrate, and value
- Community views will shape and influence public services

Harrow Labour Party Manifesto

Harrow Local Area Agreement

- Reduce health inequality, children travelling to school – mode of travel usually used, climate change

Comprehensive Area Assessment (process recently abolished)

- Number of people killed and seriously injured in Harrow, number of children killed and seriously injured in Harrow, per capita percentage reduction in CO₂ emissions, working people with access to employment by public transport.

Harrow Local Development Framework

Harrow Highway Network Management Plan July 2008

Harrow Rights of Way Improvement Plan October 2007

Transport Local Implementation Plan 2005/6 to 2010/11

The Mayor's Transport Strategy is clearly a driving force for much of the borough transport activities. Key proposals from this strategy are to do the following:

- Manage and enhance the transport system
- Encourage more cycling and walking
- Improve safety and security

- Improve London's environment
- Reduce transport's contribution to climate change and improve its resilience
- Manage the demand for travel

A complete list of the borough's transport policies is provided in Appendix B in a form more useful for working borough officers.

Many of the policies from all areas are interlinking and influence one another.

1.6.2 Equality Impact Assessment

The London Borough of Harrow is committed to achieving equality of opportunity both as a large employer of people and as a provider of services. The council believes in the need to eliminate unlawful discrimination and to promote equality of opportunity in all activities. Equality of opportunity underpins all that we do as a local authority from the way we provide services to the way we employ our staff.

Equality issues have been considered throughout the development of LIP2. A table showing the expected equalities impact of programmes identified in the delivery plan is provided in Appendix A: Equality impact of LIP2.

Harrow Council aims to ensure that all groups and individuals within the community are given the full opportunity to benefit from the services provided. No service user or potential service user will be unlawfully discriminated against because of age, being a gay man, lesbian or transsexual, colour, disability, race, ethnic or national origin, gender, marital status, political or religious beliefs or trade union activities.

The Council considers all projects that promote alternatives to the car to be to the benefit of increased social inclusion.

The programmes included in this LIP have been submitted after consideration of their impact on all of the community. Had any of the programmes had a detrimental affect on any of the equality target groups then their inclusion would have been reconsidered.

1.6.3 Strategic Environmental Assessment (SEA)

European Directive 2001/42/EC (EC, 2001) requires that an SEA is simultaneously prepared alongside the development of LIP2. This is because LIP2 is a statutory document containing future transport plans and programmes. The objective of the "SEA Directive" is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans with a view to promoting sustainable development. LIP2 consultation took place alongside the SEA environmental report consultation.

In line with the legislation, an environmental statement will be produced following Council adoption of LIP2.

Following consultation of the SEA scoping report between 11 April 2010 and 24 May 2010, changes were made to the Environmental report as well as to various sections of LIP2. The key specific change made to LIP2 was a revision to Harrow LIP2 objective 1 ensuring that the transport system supports access to cultural heritage and to outdoor green space. The other changes made as a result of the SEA environmental report consultation mainly refer to the way the environmental impact of LIP2 will be monitored and to additional pieces of recent legislation to be considered.

1.6.4 Political environment

Before consulting on the draft LIP2, the issues were considered by the Environment and Community Safety Portfolio Holder and the Traffic and Road Safety Advisory Panel. In addition, various interest groups discussed contents with borough officers.

1.6.5 Joint working

The contents of this plan have also been developed considering the impact of transport on the work of other directorates and in particular in conjunction with those developing Harrow's Local Area Agreement, Climate Change, Engineering and Education officers.

1.6.6 Consultation

Statutory consultation for LIP2 includes the Commissioners of Police, Transport for London and organisations that represent disabled people. In Harrow we will consult Harrow Association of Disabled people as the main representative of this group. We will also consult neighbouring boroughs, local environmental groups and other potentially interested parties. The document will also be made available on the Harrow website for wider general public consultation.

A full consultation report accompanied the approval of this document to the Council cabinet meeting of 19 May 2011. This is available from Harrow's website.

1.6.7 LIP2 Structure

The remainder of this document follows the structure below:

Chapter 2 - Mayoral goals and Harrow's transport objectives contains actions to support the Mayoral objectives

Chapter 3 - contains actions to support Harrow's transport objectives

For future ease of reference, all policies have been recategorised in line with the previous LIP and are provided in Appendix B.

Chapter 4 - Performance Monitoring Plan provides targets and indicators which will be used to monitor progress against our objectives.

2. Mayoral goals and Harrow’s transport objectives

2.1 Meeting the Mayor’s goals – challenges and action

2.1.1 Guidance on preparing LIP2 requires the boroughs to identify how we will achieve the Mayoral goals, challenges and outcomes as identified in the Mayor’s Transport Strategy.

2.1.2 This chapter addresses this requirement. The challenges have been developed based on local knowledge and issues identified from a variety of sources including the West London sub-regional transport plan. Many of the actions identified are relevant to more than one challenge and objective but in order to reduce duplication the actions have only been referred to under a single objective.

2.1.3 The Mayor’s goals challenges and outcomes are shown below:

Goals	Challenges	Outcomes
Support economic development and population growth	Supporting sustainable population and employment growth	<ul style="list-style-type: none"> Balancing capacity and demand for travel through increasing public transport capacity and/or reducing the need to travel
	Improving transport connectivity	<ul style="list-style-type: none"> Improving people’s access to jobs Improving access to commercial markets for freight movements and business travel, supporting the needs of business to grow
	Delivering an efficient and effective transport system for people and goods	<ul style="list-style-type: none"> Smoothing traffic flow (managing road congestion and improving journey time reliability) Improving public transport reliability Reducing operating costs Bringing and maintaining all assets to a state of good repair Enhancing use of the Thames for people and goods
Enhance the quality of life for all Londoners	Improving journey experience	<ul style="list-style-type: none"> Improving public transport customer satisfaction Improving road user satisfaction (drivers, pedestrians, cyclists) Reducing public transport crowding
	Enhancing the built and natural environment	<ul style="list-style-type: none"> Enhancing streetscapes, improving the perception of the urban realm and developing better streets initiatives Protecting and enhancing the natural environment
	Improving air quality	<ul style="list-style-type: none"> Reducing air pollutant emissions from ground-based transport, contributing to EU air quality targets
	Improving noise impacts	<ul style="list-style-type: none"> Improving perceptions and reducing impacts of noise
	Improving health impacts	<ul style="list-style-type: none"> Facilitating an increase in walking and cycling
Improve the safety and security of all Londoners	Reducing crime, fear of crime and antisocial behaviour	<ul style="list-style-type: none"> Reducing crime rates (and improving perceptions of personal safety and security)
	Improving road safety	<ul style="list-style-type: none"> Reducing the numbers of road traffic casualties
	Improving public transport safety	<ul style="list-style-type: none"> Reducing casualties on public transport networks
Improve transport opportunities for all Londoners	Improving accessibility	<ul style="list-style-type: none"> Improving the physical accessibility of the transport system Improving access to services
	Supporting regeneration and tackling deprivation	<ul style="list-style-type: none"> Supporting wider regeneration
Reduce transport’s contribution to climate change and improve its resilience	Reducing CO ₂ emissions	<ul style="list-style-type: none"> Reducing CO₂ emissions from ground-based transport, contributing to a London-wide 60 per cent reduction by 2025
	Adapting to climate change	<ul style="list-style-type: none"> Maintaining the reliability of transport networks
Support delivery of the London 2012 Olympic and Paralympic Games and its legacy	Contributing to a successful 2012 Games and its legacy	<ul style="list-style-type: none"> Transport infrastructure and services Physical and behavioural transport legacy

G1 MTS Goal: Support economic development and population growth

MTS Challenge: Support sustainable population and employment growth

- 2.1.4 Over the next decade, Harrow's population will continue to rise and the average household size will decrease. According to the West London sub-regional transport plan, in Harrow additional housing projected is 350 houses per year until 2021. This is less than neighbouring boroughs, but still significant. Contributing to this is the increasing number of people living alone and in particular the increasing number of older people living alone. These issues all have an impact on the wider community and the services they expected. They also impact on the transport needs for the area.
- 2.1.5 The high car ownership that currently exists in Harrow is of considerable concern that may intensify as the population grows. According to the West London sub-regional transport plan, there is also lower bus use in Harrow and Hillingdon where car ownership levels are highest.

Table 2-1: Car ownership in West London boroughs

Boroughs	Ownership by Household (Percentage)		
	No car	One car	Two or more cars
Brent	43	43	14
Ealing	36	48	15
Hammersmith & Fulham	54	39	7
Harrow	30	45	25
Hillingdon	28	44	28
Hounslow	33	46	21

- 2.1.6 As the population grows, it becomes increasingly important that Harrow encourages sustainable forms of transport such as walking, cycling and using public transport. In addition, local areas will experience on-street parking stress as residential population density increases. This needs to be monitored and reviewed and where appropriate Controlled Parking Zones (CPZs) will be considered to balance the needs of residents, businesses, visitors, utilities etc. (See proposed action G1.7) Encouraging the use of sustainable forms of transport will also be helped through developing travel planning. (See proposed action G1.3) Harrow needs to address the low levels of cycling in the borough compared with other parts of London. Harrow residents make only 5% of current cycle trips but may account for about 13% of the potentially cyclable trips in the west London sub-region. This is according to the recent TfL cycling segmentation work. This is a key input into Harrow LIP2 objective 9.
- 2.1.7 To address the population and demographic changes, Harrow needs to provide the infrastructure and networks which make the Borough and London work for people, businesses and visitors. As part of strategic objective 2 in Harrow's core strategy in order to ensure Harrow's residents have the best possible access to employment opportunities is the need to direct major employment-generating development to appropriate sites within the

Intensification Area or other areas of existing high public transport provision. The proposed Intensification Area includes the 2 town centres of Harrow and Wealdstone as well as the Station Road corridor connecting both these centres. This area can support significant growth and change, and is suitable for higher density residential and mixed use development, based around the town centres that have (or will have) the transport, schools, open space, community services, shops and employment base needed to create vibrant and viable town centres and renewed and sustainable communities. This is a key input into Harrow's objective 1. (Also see proposed action G1.5)

2.1.8 By 2026 the Intensification Area is planned to have delivered around 2500 new homes and up to 2000 jobs.

2.1.9 Harrow town centre is now in need of some regeneration and enhancement. To safeguard Harrow town centre's metropolitan status, the borough needs to:

- Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport – this is a key input into Harrow's objective 12 (See proposed action G1.4)
- Improve the quality, capacity and accessibility of Harrow-on-the-Hill station and Harrow bus station as included as part of strategic objective 5 in Harrow's core strategy. (See also proposed action G1.1)

2.1.10 Beyond the Intensification Area, the borough needs to ensure Harrow's residents have the best possible access to employment opportunities. This is identified as part of strategic objective 2 in Harrow's Core strategy. This will be assisted by prioritising transport investment in schemes which improve access to employment and particularly orbital transport schemes. This is a key input into Harrow's LIP2 objective 2.

2.1.11 Strategic objective 8 in Harrow's core strategy recognises the need to encourage patterns of growth which lead people to live economically and physically active lifestyles. This is a key input into Harrow's LIP2 objective 3.

2.1.12 Improvements identified in TfL's Business Plan that will be beneficial to the population growth the borough are:

- Replacement of the signalling and train control system on the Jubilee line will enable more trains to run, increasing capacity by a further 33 per cent – equivalent to 5,000 more passengers an hour – and reducing journey times by 22 per cent;
- On the Piccadilly line the planned upgrade will be completed in 2014. This will deliver more spacious and faster trains, and new signalling allowing a much higher frequency of service. Overall journey times will be cut by about 19 per cent and capacity will increase by 24 per cent;
- On the Metropolitan line, 58 new eight-car trains will be introduced in 2010. In addition, a new signalling system will be in place by 2016, which will mean capacity on the line will increase by 27 per cent. (*Harrow is concerned about the shortage of available seats before the signalling system works have been completed*).

2.1.13 These improvements will be of most benefit to Harrow town centre where the increased capacity of the service should benefit the economic outlook of the town centre.

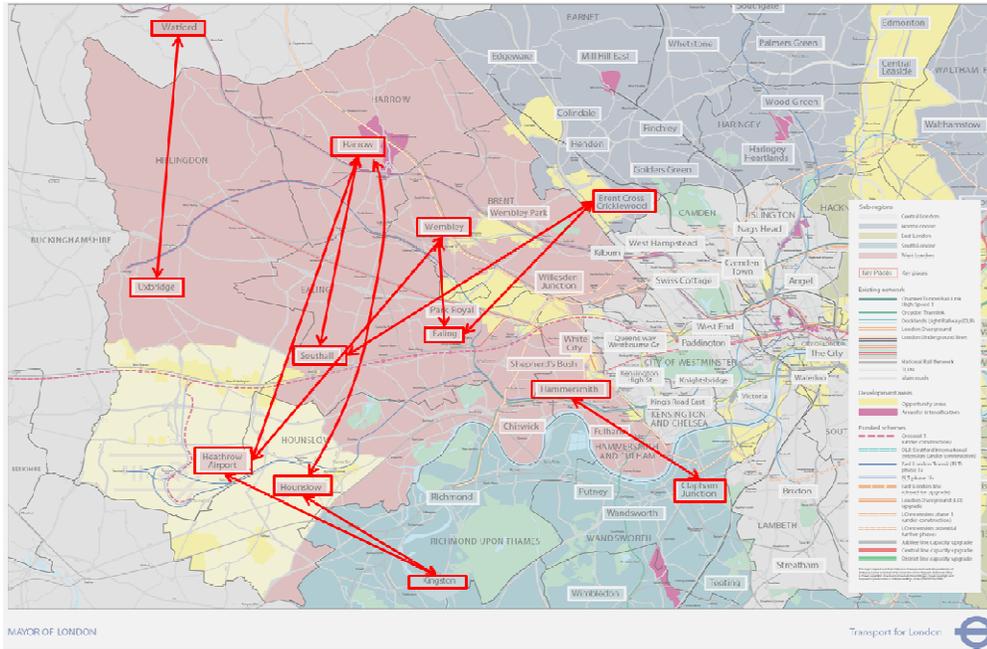
MTS Challenge: Improve transport connectivity

2.1.14 Harrow has good transport connectivity to Central London and to many places further afield. However, there is poor connectivity for orbital routes around London and also to the planned

Crossrail service. The West London sub-regional transport plan identifies that between 2006 and 2009, 87% of trips originating in Harrow had destinations in West London boroughs and only 4% of trips had a Central London destination. This is a key input into Harrow LIP2 objective 2.

- 2.1.15** In addition, the direct rail link from Harrow and Wealdstone station to Gatwick airport no longer exists and residents in the borough wanting to reach Gatwick are left with a crowded non-direct rail option only. (See proposed action G1.2)
- 2.1.16** The West London sub-regional transport plan specifically identifies the Harrow Intensification Area as an area where the projected future growth requires that congestion, street-scenes and public transport connectivity within the area be prioritised. Public transport connectivity to some key locations within West London is particularly difficult and specifically links reaching Heathrow Airport, Hounslow and Southall in Ealing by public transport are deficient. This is also identified by the West London draft sub-regional transport plan. In the longer term, Harrow's existing rail strategy is to lobby for a direct rail link from the borough to Luton airport
- 2.1.17** The borough is concerned with the poor public transport linkages to health care facilities in the borough including the link between Stanmore station and the Royal National Orthopaedic Hospital and the service provided to Alexander Avenue polyclinic. The Royal National Orthopaedic Hospital is served by a private bus from Stanmore station. However this is poorly advertised and promoted and a very low frequency.
- 2.1.18** Harrow residents frequently raise their concerns about public transport links to Northwick Park Hospital. It is particularly frustrating that bus route 182 southbound passes the hospital but does not drive into the hospital grounds. In addition, extending route 204 into the hospital would also be of significant local benefit.
- 2.1.19** There is poor transport connectivity within Harrow to some of the greener parts of the borough and to some of Harrow's tourist attractions such as Harrow on the Hill. These locations are important for tourism in the borough. (See proposed action G1.2)
- 2.1.20** The expected population growth within the new Intensification Area will require improved transport connectivity. As included in Harrow's Core strategy, within the Station Road corridor there is potential to improve transport connectivity through re-engineering of the carriageway, supported by enhancements to the urban realm and streetscape to create a more attractive 'gateway' to and between Harrow's main town centres. This is a key input into Harrow LIP2 objective 8. (See also proposed action G1.5)
- 2.1.21** It is a barrier to cycling in the borough that there is no suitable safe secure and weatherproof cycle parking at either Harrow and Wealdstone station or at Harrow on the Hill station. This is also identified in Harrow's core strategy. At both these stations, the borough has provided some on street parking, but the land owned by TfL and by Railtrack is far more appropriate for safe and convenient cycle parking. Failure to provide these improvements limits the attractiveness of some local cycle trips. (See proposed action G1.6)

Figure 2-1: Connectivity challenges in West London



MTS Challenge: Deliver an efficient and effective transport system for people and goods

2.1.22 Harrow’s place survey carried out by MORI gives an indication of areas which are of most concern to local residents. When asked about what most needs improving in the borough, road/pavement repairs have been consistently highly mentioned. In addition, the condition of roads in Harrow has a significant impact on the public’s overall satisfaction with the Council.

Year	Reported by residents as <i>most needs improving</i>	
	Road/pavement repairs	Congestion
2008/9	45%	40%
2009/10	45%	40%
Outer London average 2009/10	39%	39%

2.1.23 The percentage of roads where maintenance should be considered is a national indicator and measured in all London boroughs. Although borough residents report that roads and pavements as the area that most needs improving in the borough, the reality is that the condition of roads in Harrow are above average when compared with road conditions for all London. This is shown in the following table:

Harrow	NI168 - Principal roads where maintenance should be considered	NI169 - Non-principal classified roads where maintenance should be considered
2005/6	13%	4%
2006/7	10%	7%
2007/8	4%	5%
2008/9	6%	7%
London average 2008/9	8%	8.5%

- 2.1.24** Priority regarding where road maintenance takes place on principal roads is based on an annual road condition survey. This is outlined further in Harrow's Asset Management Plan (HAMP).
- 2.1.25** The Traffic Management Act places a duty on the Council to address congestion on the roads in the borough. Harrow's Highway Network Management Plan* provides details as to how this is done. In particular, congestion is addressed through increasing the attractiveness of sustainable forms of transport, co-ordinating planned roadworks and by travel awareness campaigns. Congestion is identified as a key challenge in Harrow's story of place contained in the Harrow Sustainable Community Strategy. This is a key input into Harrow's LIP2 objective 10.
- 2.1.26** Congestion and traffic delays impact both an individual's economic situation as well as the overall economy. The delivery of goods is improved in the borough through working with the West London Freight Quality Partnership who work to promote constructive solutions to freight delivery problems. (See proposed action G1.8) TfL provides London boroughs with data on speeds and traffic delays obtained from vehicles fitted with GPS devices for a pre-defined network of interest. This data shows Harrow's speeds and traffic delays to be in line with those of the surrounding West London boroughs. Freight delivery times are obviously most impacted by this issue. In addition, the noise impact of freight trips is often a localised disruption. Encouraging and promoting preferred routes for freight will help address some of these problems. This is a key input into Harrow's LIP2 objective 10. (See proposed action G1.9)
- 2.1.27** For May 2009, the GPS data provides the following information:

	AM Peak	Inter Peak	PM Peak
Average speed in kms/hour Harrow (Average for West London)	30 (30)	30 (33)	28 (28)
Average delay in mins/km Harrow (Average for West London)	0.6 (0.7)	0.6 (0.6)	0.8 (1.0)

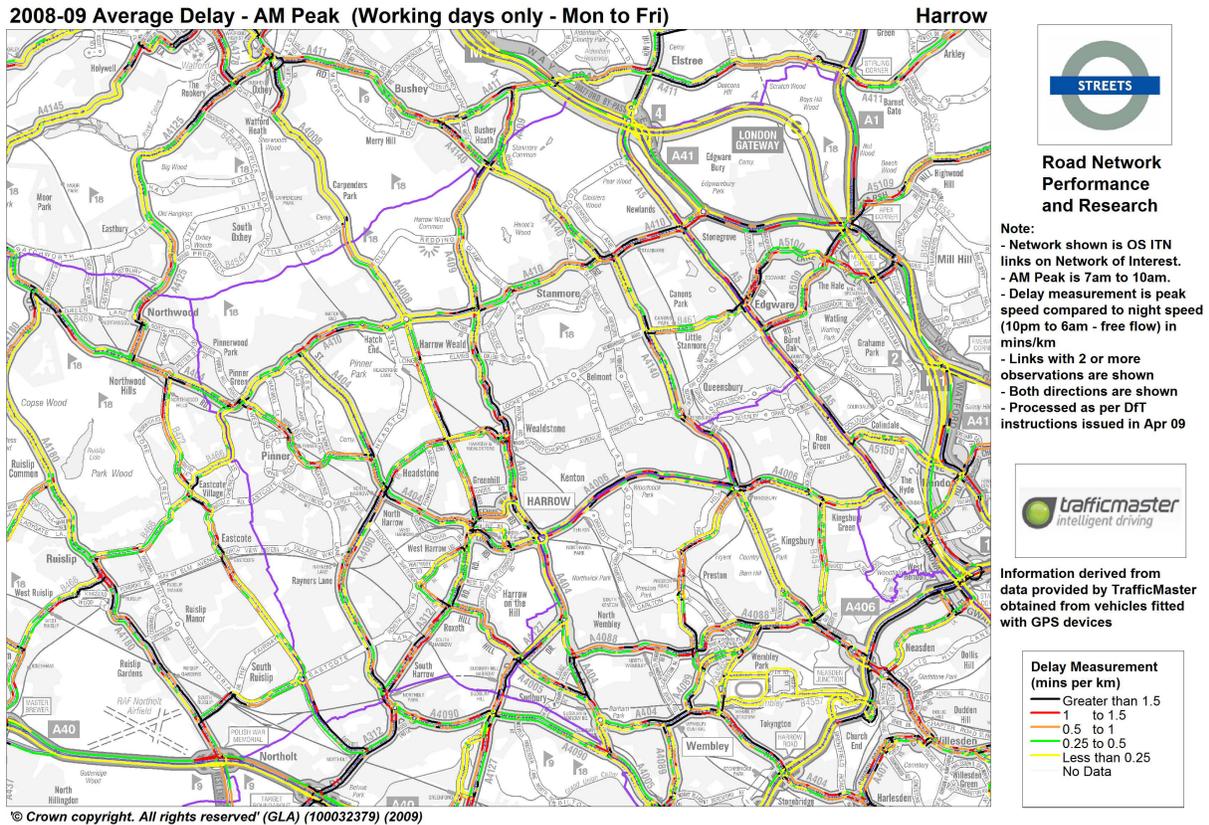
- 2.1.28** The following table shows the average journey times for West London boroughs and shows that journey times in Harrow are better than all the surrounding boroughs other than Hillingdon.

Average journey times (mins and secs per mile)			
Local Authority	2006-07	2007-08	2008-09
Brent	04:32	04:31	04:28
Ealing	04:36	04:38	04:29
Hammersmith and Fulham	05:30	05:22	04:56

* Available on Harrow's website www.harrow.gov.uk

Average journey times (mins and secs per mile)			
Harrow	03:45	03:37	03:39
Hillingdon	03:10	03:07	03:04
Hounslow	04:24	04:19	04:13

Figure 2-2: Average Delays as a result of congestion – AM Peak 2008-09 (Mon to Fri only)



G1 Proposed actions to be taken to support the Mayor’s goal to support economic development and population growth

- G1.1 Lobby TfL to improve the quality, capacity and **accessibility** of Harrow-on-the-Hill station and Harrow bus station.
- G1.2 Work with TfL to improve bus service reliability and to improve orbital bus links between the town centres and major employment locations and to other key destinations within Harrow and neighbouring boroughs.
- G1.3 Promote and support the development of travel plans in accordance with TfL guidelines either for individual organisations or on an area-wide basis as appropriate
- G1.4 Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport
- G1.5 Improve transport connectivity within the Intensification Area between Harrow Town Centre and Wealdstone including the provision of in-station cycle parking.
- G1.6 Improve the environment for pedestrians and cyclists in the whole borough and particularly

	within the Harrow Intensification Area.
G1.7	Monitor and review the provision and operation CPZs in all areas of the Borough experiencing on-street parking stress and install new CPZs subject to, demand and in consultation with the local community. Programme of work to review and install CPZs is outlined in the Programme of Investment.
G1.8	Continue to work with Freight Quality Partnership as a consultative forum for consideration of all matters of mutual interest.
G1.9	Produce and publish a map setting out key information in respect of restrictions on lorry movement within the Borough, in terms of: <ul style="list-style-type: none"> • Width, weight and length restrictions • Low bridges • Loading bans • Access restrictions, including pedestrian areas• • Preferred routes for lorries

Additional borough actions relevant to this goal are:

H1.1	Work with TfL to improve the penetration and expansion of local bus services into every local neighbourhood area – either by extending existing routes or, where necessary, by promoting new routes – this will be subject to the evaluation of the local impact of any additional bus services
H1.2	Encourage the provision of 'transport hub' facilities where these can serve wide catchment areas and connect up Harrow's and London's public transport network
H1.3	Seek to secure a fully integrated approach to the provision and operation of public transport services within Harrow, including: <ul style="list-style-type: none"> - Improving the ease and convenience of approach routes to service access points, and the quality and clarity of the access signing - Take account of the specific needs of people with impaired sight or impaired mobility. - Improve taxi facilities at rail and underground stations
H1.4	Deploy full range of available bus priority measures ensuring that measures are designed to reduce problems for all modes of transport
H1.5	Enforce all road traffic, parking and waiting regulations in the interests of improving bus priority. Where possible engineering solutions will be used to minimise the need for additional enforcement.
H1.6	Persuade TfL to concentrate on continuing to improve public transport service reliability, ensuring improved radial and orbital services.
H1.7	Work with TfL to prioritise available resources to provide the road space and traffic regulatory / management infrastructure to support development of the bus services as well as additional bus services
H1.8	Recognising that road transport will remain the basis for freight movement, delivery and servicing provision within Harrow, the Council will promote and maintain local area lorry bans together with supporting initiatives to move freight by non-road transport modes
H1.9	Work with GPS providers to ensure that freight routes are appropriately guided within the borough and avoid residential areas
H1.10	Seek to contribute to the delivery of an Area Action Plan for the Harrow & Wealdstone intensification area action plan which may include the widening of Station Road between Harrow on the Hill station and Harrow and Wealdstone station and key junction upgrades within the intensification area to reduce congestion – the area is also likely to include the Legible London concept.
H1.11	Periodically review the provision in town centres and the Area of Intensification for all aspects of servicing, delivery, loading/unloading and freight movement, with particular regard to its impact on all modes of transport, the local economy and the local environment.
H1.12	Ensure that charges for parking support the economic vitality of all town centres.
H1.13	Prepare and publish a public transport leaflet and map, and regularly update and distribute copies as needed
H1.14	Prioritise the implementation of neighbourhood and corridor and major schemes which most

- benefit connectivity in the Intensification Area
- H1.15 Review the parking regulations in the Intensification Area to ensure that the needs of planned growth are appropriately addressed
- H1.16 Give high priority to the enforcement of parking and road traffic regulations, particularly to those affecting the safety of all road users, reliable operation of bus services and the prevention of traffic congestion
- H1.17 Maximise the effective use of camera enforcement where there are safety benefits to be gained from better enforcement.
- H1.18 Promote and secure the adoption of consistent and complementary strategies at national, regional, London, sub-regional and neighbouring local authority levels and through the restraint-based car-parking standards
- H1.19 In the development and operation of parking schemes and to ensure transparency, the council will follow the guidelines as outlined in the parking and enforcement plan which will be regularly reviewed and updated
- H1.20 Encourage schools to work with the Council to review catchment areas and intake policies to ensure that the transport implications of these are fully taken into account. The focus will be on avoiding decisions that exacerbate the need to travel without strong educational or social reasons and consider changing policy to reduce the need to travel by car
- H1.21 Support local businesses by giving priority to short stay on-street parking and by discouraging long-stay parking
- H1.22 As reviews of CPZs take place, progressively enable the provision of business parking permits in CPZs for vehicles where permits are required as a major part of the operation of the business and where such journeys are not viable without such parking permits
- H1.23 Ensure that charges for off-street parking:
- a. Support the economic vitality of all town centres
 - b. Finance progressive improvements to the standards of the council owned car parks
 - c. Maintain price competitiveness with comparable privately operated car parks
 - d. Encourage short stay parking with rapid turnover of spaces and deter long-stay parking where appropriate
 - e. Reduce the demand on surrounding on-street pay and display parking
 - f. Are set with the aim of car parks being 85% full in peak periods
 - g. Are self financing
- H1.24 Seek to provide adequate delivery and servicing access to shops, businesses and residential premises and in particular to provide convenient on-street short-stay spaces for servicing / delivery vehicles.
- H1.25 Use Section 106 Planning Agreements to secure developer contributions towards the costs of meeting and ameliorating the travel demand generated by development through improvement to public transport, walking and cycling, installing parking controls and, where necessary, creating regulated and controlled public car-parks
- H1.26 When considering housing developments the council will encourage developers to explore the potential for schemes to provide access to cars without individual ownership, possibly linked to inducements to use other modes
- H1.27 Ensure that the policies in the LDF promote the provision of local facilities in accessible town centre locations
- H1.28 Ensure convenient access for walking, cycling and public transport be required in the design and layout of new development
- H1.29 Seek to ensure that new facilities to reduce car dependency e.g. real time public transport information and shopping lockers are placed in shopping centres
- H1.30 Seek to ensure through its LDF that provision of local leisure facilities, particularly play and community-based, are close to residential areas, together with appropriate centralised town centre venues
- H1.31 Require developers to produce access plans for non-car users as well as car users for new leisure development (including redevelopment)
- H1.32 Require, as a condition of securing planning permission, that development proposals make proper off-street provision for servicing and loading/unloading within the development site, in such a way that all vehicles entering or leaving a site are enabled to do so in a forward gear
- H1.33 In considering planning applications for non-residential development the Council will have

regard to the specific characteristics of the development including provision made for:

- Operational parking and servicing needs
- Convenient car-parking for people with disabilities
- Car parking related to shift and unsociable hours working
- Convenient and secure parking for bicycles (and provision of showers and changing facilities for cyclists)
- Needs of parking for motorcyclists

H1.34 Where accessibility by non-car modes is particularly good or can be made so, the council will actively seek to secure lower levels of car parking provision or even zero provision (other than that required for disabled persons) in developments, and require the completion of a binding agreement to ensure that any measures necessary to improve accessibility by non-car modes are secured

H1.35 The council will support health providers in their consideration and provision of town centre based local facilities, clinics and more home services.

H1.36 Request the local Metropolitan Police to review their enforcement priorities in the context of this Plan to ensure that they are consistent and action necessary changes

H1.37 The council will support and seek, via the responsible regional/sub-regional authorities, appropriate sub-regional provision of break-bulk, consolidation, distribution and modal transfer facilities for freight management, and appropriate and effective access to those facilities from the Borough

H1.38 The council will work with the Mayor, the GLA and the Government to pursue the progressive removal / control of “free” parking – through planning agreements (new development), through voluntary initiatives (retail partnerships) or by extending the principle of charging for car parking spaces

H1.39 Work with TfL and bus operators to ensure adequate off-highway facilities are available for the storage and maintenance of buses at appropriate locations and to ensure that bus stands are appropriately located

G2 MTS Goal: Enhance the quality of life for all Londoners

2.1.29 Harrow’s engineering, traffic and network management sections have all achieved ISO 14001, an environmental accreditation which ensures that all environmental issues are considered at every stage of every project, all the way through from design until build. The affect of this is that air quality and noise impacts of all projects are carefully considered for all new work. (See proposed action G2.9)

MTS Challenge: Improving the journey experience

2.1.30 Many factors can contribute to the frustration and irritation of travelling by all modes. Some of the issues are unavoidable. However some can and should be improved or at least mitigated. Engineering works interrupting services, traffic congestion, poorly maintained roads and pavements, low frequency public transport services particularly at night, overcrowded buses or trains, lack of convenient cycle parking, unexpected local parking charges particularly at the borough boundaries and rushes of school children interchanging on buses across the network at the end of the school day all impact on the quality of the journey experience and are all issues that do occur in the borough. Although, Harrow cannot solve all of these problems alone, these are issues that Harrow will work to address. (See proposed actions, G2.1, G2.2, G2.3, G2.4, G2.5, G2.10, G2.11)

2.1.31 Journeys taken by bus, car, bicycle or by foot can be hampered by roads and pavements in a poor state of repair. A badly maintained road or pavement can cause accidents, make

journeys less comfortable and most definitely worsen the journey experience. (See proposed action G2.5)

- 2.1.32** Despite all the evidence that roads and pavements in the borough are not in a significantly worse state than neighbouring boroughs, Harrow's place survey indicates that residents in Harrow mention that roads and pavements in Harrow need improving more than residents of neighbouring boroughs.
- 2.1.33** The lack of appropriate cycle parking near Harrow on the Hill station and Harrow and Wealdstone station hampers journeys that involve this modal interchange. (See proposed action G2.3)

MTS Challenge: Enhancing the built and natural environment

- 2.1.34** Harrow is famous for the quality and quantity of green belt land in the borough. This provides access to nature and recreation for many local people, complementing the borough's range of parks and open spaces. Easy access to the borough's green space is an important part of living in Harrow. To some extent, green and open spaces in the borough define the entire borough. Increased growth in the borough will place pressure on the borough's natural landscape, because open spaces will be used more intensively and be subjected to increasing and often competing demands.
- 2.1.35** Outside the green belt, Harrow is intensively built up with little vacant, undeveloped or under-developed land. The borough needs to protect the environmental and heritage qualities of areas that are unable to accommodate increased population densities. At the same time, Harrow needs to improve the new Intensification Area to ensure that development is managed in a comprehensive manner and set in the context of delivering the built form as well as social, environmental and economic outcomes for the area. Harrow's LDF will address these issues in further detail.
- 2.1.36** Traffic in the borough has a detrimental impact on the historic environment, air quality damage, noise and even building vibration. The borough needs to ensure design and building sensitivity in these areas through good design and use of materials appropriate to the location and historic context.
- 2.1.37** In some locations in the borough such as Hindes Road near Tescos in Harrow town centre, Canons Corner in Stanmore and the junction of Cecil Road and Headstone Drive in Wealdstone we will be reviewing the need for sections of guard railing in order to reduce street furniture clutter in the area. In addition, when 20mph zones are introduced, because only the entry points are signed, road hump signs and posts can be removed and therefore there is a reduction in street signage clutter. Removing street clutter will also be considered in local shopping areas subject to funding.
- 2.1.38** Harrow has produced a Highway Asset Management Plan (HAMP) which describes Harrow Council's approach to management of carriageways, footways, structures, lighting, drainage (road gullies), street furniture, highway drains and watercourses, culverts. In the future this will extend to parks, open spaces and cemeteries, subsurface drainage assets, fences and guardrails, trees, verges and enforcement cameras. This is a publicly available document which is kept under continual review as assets are replaced and local requirements are reviewed.
- 2.1.39** Harrow routinely inspects all assets to ensure they are fit for purpose. Inspections take place monthly in shopping areas and less often in all other areas. All assets including road markings, lamp columns and illuminated street furniture are regularly inspected. When

problems are identified they are repaired in line with the service standard. Priority to repairs is always given to works where safety is at risk.

MTS Challenge: Improving air quality

2.1.40 Harrow Council declared its whole borough an air quality management area (AQMA) in January 2002. Air quality modelling has identified road traffic as the main contribution to nitrogen dioxide concentrations within the borough, whilst the majority of PM10 concentrations were attributed to background sources. However, those locations which experience the highest PM10 concentrations are also those most influenced by the contribution from road transport.

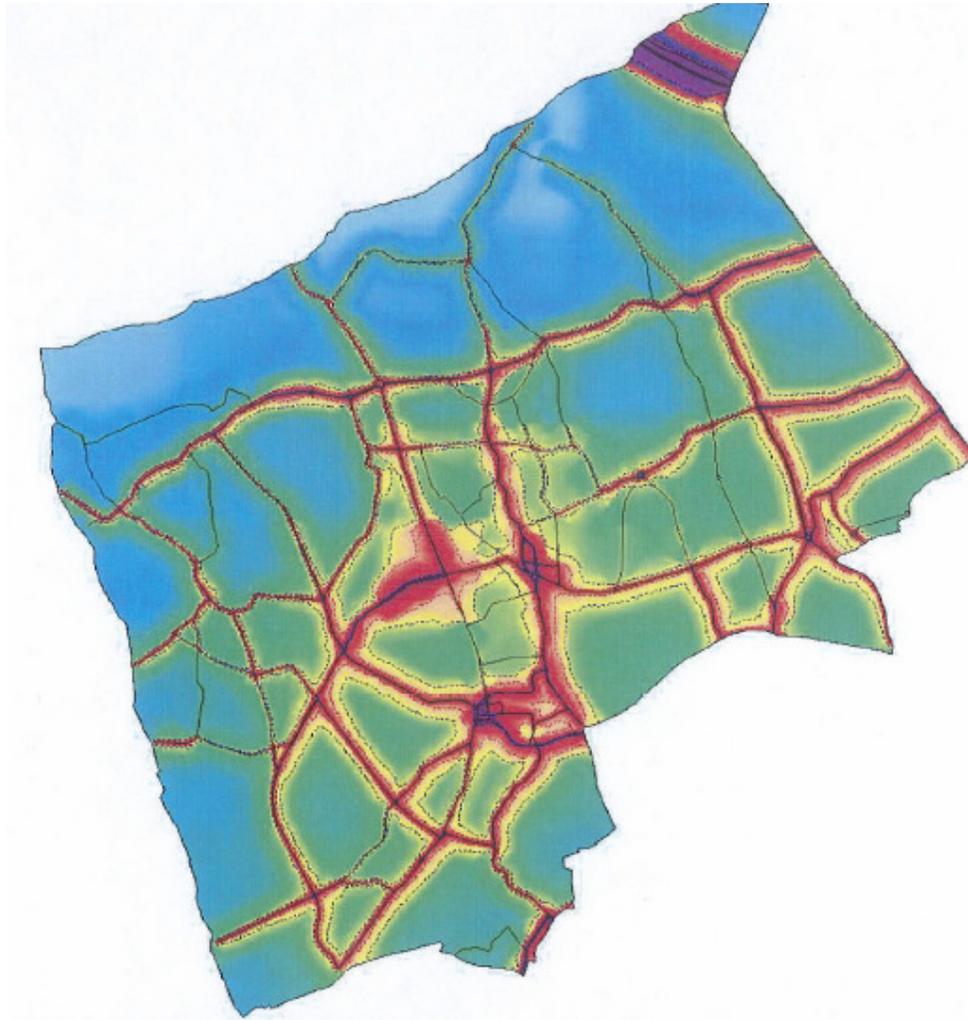
2.1.41 Harrow's SCS identifies the following actions:

- Increase environmental sustainability and air quality through reducing the use of cars as the main mode of travel to Harrow schools
- Reduce CO₂ emissions in Harrow
- Continue to undertake a tree replacement programme to preserve and enhance Harrow's trees

This is a key input into Harrow LIP2 objectives 4 and 9.

2.1.42 As road traffic is the main source of nitrogen dioxide and a major source of fine particle emissions within the borough, measures to attempt to improve air quality in Harrow need to focus on reducing emissions from road traffic. (See proposed action G2.9) Figure 2-3 shows the NO₂ concentrations in the borough as modelled in 2007.

Figure 2-3: NO₂ Modelled Contour map of annual mean concentrations (µg m⁻³)



MTS Challenge: Improving noise impacts

- 2.1.43** There are no regular reports of locations where traffic noise is a significant problem in the borough. However, ambient traffic noise exists all across London and it is likely that many of the public simply accept it as an inevitable though unpleasant part of life in London. Vehicle technological improvements result in quieter vehicles and as older vehicles are removed from the road network at the end of the vehicle life, traffic will become quieter.
- 2.1.44** Noise arising from any works on roads in Harrow is addressed through contractors signing a Considerate Code of Conduct agreement. This ensures that works are carried out at appropriate times and that disruption is minimised. (See proposed action G2.9)
- 2.1.45** Freight being transported through the borough can cause local noise issues. However there are no discernable patterns showing any regular problem.

MTS Challenge: Improving health impacts

- 2.1.46** The borough's range of parks and open spaces along with the easy access to nature and recreation for many local people is of enormous benefit to the health of those fortunate enough to use these assets. Harrow's Rights of Way Improvement Plan produced in 2007, considered the public requirements regarding improving access to the outdoors and the facilities available when accessing the outdoors. Increasing access, use and the upkeep of the local natural environment will be of benefit to all. Harrow will be updating its definitive map in line with legislation to ensure that all known rights of way are included. This is a key input into Harrow LIP2 objective 11. (See proposed actions G2.8, G2.12)
- 2.1.47** For the individual, benefits of access to the outdoors include:
- Better physical health – reduced obesity and disease associated with sedentary lifestyles
 - Better mental health – reduced stress and increased self-esteem through direct contact with wildlife, greenspace and landscape etc.
 - Improved overall quality of life – outdoor recreation with friends and family, source of artistic inspiration and cultural creativity
- 2.1.48** The wider benefits to society of individuals increasing access to the outdoors include:
- Greater support and contribution to nature conservation activities
 - Increased understanding and respect for the natural environment
 - Increased economic spend by visitors and to the leisure sector in general
- 2.1.49** Both walking and cycling also have significant direct impact on personal health. Increasing the amount we walk or cycle will have direct health benefits and the low level of walking and cycling rates in the borough are of concern for local health. This is particularly so as diabetes levels in the borough which correlate to obesity are estimated to be the highest in London and above the average for England. Gaps in life expectancy between wards with the highest and lowest life expectancy are 6 years for men and nearly 9 years for women. Residents in the centre and south of the Borough suffer a higher incidence of poor health and the consequences of poorer health than other areas. Encouraging residents to live more healthy lifestyles has been identified in Harrow's core strategy and needs to play an important role in tackling the high level of diabetes. This is a key input into Harrow LIP2 objective 9. (See proposed action G2.6)
- 2.1.50** TfL estimates that there are 70,000 daily trips currently being undertaken by other modes in each Outer London borough that could be made by bike. If this were achieved, this would have a significant impact on the health of those cycling. This is a key input into Harrow LIP2 objective 9.
- 2.1.51** Harrow's Local Area Agreement includes the National Indicator 198 which records the number of children travelling to school by the mode of transport usually used. Harrow's target is for a 1% drop each year of the overall proportion of children travelling to school by car. There has been a 6% reduction in car use for journeys to school since 2007/8. The development and monitoring of school travel plans helps to promote the importance of using sustainable modes of transport to the school community.
- 2.1.52** Harrow will continue to improve the walking and cycling environment in all areas of the borough and in particular when improving local area access. (See proposed action G2.7) This will be through infrastructure improvements to increase the attractiveness of sustainable

forms of transport and through encouraging lifestyle changes particularly for those participating in the school car run.

- 2.1.53** Encouraging cycling by introducing additional cycle lanes in a heavily car orientated environment introduces significant local challenges. In particular, the borough can not simply remove on street parking for whole streets and introduce local cycle lanes particularly where off-street parking is not readily available to all existing residents. The Council is concerned that many cycle lanes are simply ignored by car drivers. However as the cycle lanes improve and become more attractive to cyclists, the borough will be in a better position to increase their enforcement.

G2	Proposed actions to be taken to support the Mayor’s goal to enhance the quality of life for all Londoners
G2.1	Work with TfL to improve the frequency and reliability of weekend and late night public transport services to/from Central London.
G2.2	Work with TfL to provide buses that take routes that will reduce numbers of children interchanging on buses across the network at the end of the school day.
G2.3	Liaise with Railtrack and Transport for London to address the lack of cycle parking on station land particularly at Harrow and Wealdstone and Harrow on the Hill stations.
G2.4	Work with public transport providers and regulators to ensure that engineering works and service closures are coordinated to minimise passenger inconvenience.
G2.5	Improve on the condition of Harrow roads by continuing to prioritise road maintenance in Harrow’s capital and revenue budgets.
G2.6	Promote sustainable and healthy travel choices through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking environment.
G2.7	Consider the improvement of local access by walking, public transport, motorcycling and cycling as a core element in future regeneration programmes for local centres and employment areas.
G2.8	Improve access to Harrow’s green spaces and historic areas and improve pedestrian walkways that use and link existing parks and open spaces with the town centre and transport interchanges.
G2.9	Ensure all projects consider their air quality and noise impact and that where possible mitigation is introduced to minimise adverse impacts.
G2.10	Address congestion and maximise the efficiency and reliability of the operation of the road network through methods outlined further in Harrow’s Highway Network Management Plan.
G2.11	Where practicable, seek to secure consistent cross-boundary parking charges in conjunction with neighbouring authorities
G2.12	Work to implement the statement of action identified in Harrow’s Rights of Way Improvement Plan in order to: <ul style="list-style-type: none"> • Extend the rights of way network to provide for new routes • Improve public information and publicity about the rights of way • Improve overall accessibility of the network to all but giving particular consideration to those with mobility difficulties

Additional borough actions relevant to this goal are:

H2.1	Work with borough primary schools to encourage additional school walking buses and support existing walking buses
H2.2	Ensure that all aspects of the walking environment are effectively considered when delivering works for major schemes, neighbourhood and corridor improvements. This will include signage, barriers and permeability and design to facilitate pushchairs or wheelchairs

H2.3	Promote the recreational use of cycling – but give priority to increasing cycling as an alternative to car use
H2.4	Encourage active walking as a mode of transport
H2.5	Encourage and support schools, higher and further education establishments to review their own travel plans and to achieve TfL accredited status where appropriate
H2.6	Ensure that freight movement, delivery and servicing within the borough is provided for in an environmentally sensitive, economic and efficient manner and ensuring appropriate routing avoiding residential areas
H2.7	Support the continuation and effective enforcement of the London Lorry Ban
H2.8	Produce a rolling five year Travel Awareness Campaign Programme which includes customer engagement to target behaviour change
H2.9	Increase the amount and variety of trees and plants across the Borough's open spaces and within streetscapes. Street trees will be included as part of public realm improvements and also through major schemes implementation.
H2.10	In all neighbourhoods, corridors and major schemes the borough will consider the Better Streets principals and in particular the need to reduce clutter, improve traffic management, increase the permeability of streets, creating spaces that make it easier for cyclists, pedestrians and disabled people to get about.
H2.11	Ensure cycle routes and facilities in the borough are appropriately located and regularly cleaned and maintained and that whenever possible, cycle tracks in parks are available at all hours.
H2.12	Encourage the use of bicycles generally and in particular for journeys to school.
H2.13	Encourage employers to make provision for employees wishing to cycle to a similar standard to that required from new development including the provision of “cycle pools”.
H2.14	Publish and distribute cycling leaflets and maps in areas of the borough identifying the locations of designated cycle routes, cycle parking facilities, barriers to use and main road crossings.
H2.15	Use powers as local planning authority to make planning permission for future development conditional upon the availability of an appropriate level of pedal cycle parking and facilities such as showers and lockers and encourage provision of “cycle pools”.
H2.16	Use powers and resources to provide secure and weather-protected cycle-parking at sites generating/attracting significant numbers of cycling trips – most particularly, at strategic interchanges and stations; and encourage other authorities with specific responsibilities within the Borough to do the same.
H2.17	Work with TfL to support the Mayor’s Cycle Superhighways schemes regarding improving access to the existing schemes or on the basis of bike hire space availability and work towards becoming a biking borough.
H2.18	Ensure the progressive achievement and maintenance of a high quality of cycle route provision, as well as clear continuity and consistency in design; and will ensure that, wherever practicable, provision is designed and implemented to cater for tricycle and trailer use
H2.19	Encourage recreational walking and work in partnership with health providers to continue to promote walking specifically linked to health policy
H2.20	Ensure that walking links to parks and open spaces are fully considered in new neighbourhood and corridor funded programmes
H2.21	Address the identified areas of deficiency regarding access to parks and open spaces through improved cycling and walking infrastructure as shown in Harrow PPG17 study (2010)
H2.22	Ensure that walking permeability (a multiplicity of routes to give easy accessibility to, from and within a site) is assessed and prioritised for all new residential or business developments
H2.23	Work with the key regulators and providers of rail, Underground and bus services within the Borough to progressively improve the network in terms of capacity and reliability
H2.24	Build on existing liaison arrangements with those parties responsible for regulating and operating public transport services in the Borough – issues discussed will include concerns of public transport users with both TfL bus and all rail operators and will include bus driving standards, bus emissions, driver behaviour, bikes on buses and trains, as well as general

	service provision
H2.25	Work in partnership with public transport service providers and regulators, seek to ensure that all stations and bus stop locations in the Borough are progressively improved to offer a safe, secure and passenger-friendly environment and appropriate 'state-of-the-art' passenger interchange
H2.26	Ensure that all schemes implemented follow the Harrow street furniture design guide ensuring best practice for materials and reducing street clutter.

G3 MTS Goal: Improve the safety and security of all Londoners

MTS Challenge: Reducing crime, fear of crime and anti-social behaviour

- 2.1.54** Harrow has one of the lowest crime rates in London. Nevertheless, within the Borough, there are some wide variations in the incidence of crime per 1,000 population. Whilst suburban areas generally enjoy very low rates of crime, the incidence of robbery & violent crime, property crime and anti-social behaviour tends to be higher in a small cluster in and around central Harrow.
- 2.1.55** In the past, the fear of crime has been disproportionately high when considered alongside the rate of reported crime; however in the last three years there have been substantial falls in the extent of fear of crime which, although still higher than appears justified by current crime levels, is becoming more realistic.
- 2.1.56** Although bus route crime is very low, it is markedly higher on route 140 and route H12.
- 2.1.57** How safe people feel about their local area has a significant impact on how much people will consider walking or cycling in their local area. Results from the MORI survey show the following:

		2008/9	2009/10
How safe or unsafe do you feel when outside in your local area after dark?	Very safe	8	5
	Fairly safe	34	35
	Neither safe nor unsafe	18	19
	Fairly unsafe	24	25
	Very unsafe	16	17
How safe or unsafe do you feel when outside in your local area during the day?	Very safe	35	32
	Fairly safe	49	50
	Neither safe nor unsafe	10	11
	Fairly unsafe	5	6
	Very unsafe	1	1

- 2.1.58** The area around Harrow town centre including Harrow on the Hill station and Harrow bus station are consistently reported as having the highest level of reported crime across the borough.

MTS Challenge: Improving road safety

- 2.1.59** Harrow has one of the best road safety records in London. Because the number of casualties is so low no hotspots of accidents can be identified. Harrow selects locations to address accidents by prioritising schemes that can be most effective in reducing the number of people killed or seriously injured for the available money. Motorcycle casualties are a key concern to the borough as this is the area where casualties have not dropped as much as accidents involving other vehicle types. The borough will address this through prioritising road safety work where motorcycle casualties occur and through borough educational campaigns. This is a key input into Harrow LIP2 objective 6. (See proposed actions G3.3, G3.4)
- 2.1.60** To address road safety borough wide, the borough needs to address traffic speeds. This is done by introducing 20mph zones, reviewing road speed limits, introducing speed activated signs at appropriate locations and encouraging safer driving through travel and awareness campaigns. (See proposed actions G3.1, G3.2, G3.5, G3.15)
- 2.1.61** Road layout design can also be a cause of accidents. Local roads are not designed to take high volumes of traffic and poor visibility and the road width can be a cause of accidents. Therefore there is a need to reduce traffic volumes on these roads and divert it to the main roads. In addition, all new significant traffic and highway proposals need to consider the safety of all road users at the design stage and do need to undergo a safety audit. (See proposed action G3.7, G3.12, G3.14)
- 2.1.62** Encouraging good road safety behaviour at a young age is a key part of Harrow's road safety programme. This is done through educational events in schools using role theatre and role play activities. (See proposed action G3.10)
- 2.1.63** Because the borough hopes to increase the number of people cycling within the borough, any associated cycling casualties are of concern. Safety by cyclists and by drivers towards cycling will need to be addressed through educational campaigns and cycle training. In addition, cyclists cycling on pavements do make pedestrians feel unsafe and needs to be addressed. (See proposed actions G3.11, G3.13)

MTS Challenge: Improving public transport safety

- 2.1.64** The injury risk for the public in using public transport is very low. However there is a perception by the elderly in the borough that using public transport is dangerous. This is partly because of the large numbers of school children coming out of school and crowding onto buses and trains over a short time period. This perception of danger leads to a feeling of intimidation which then spreads to the wider community and beyond just the elderly population. The Council can work to address this by working with the police, schools and TfL. Staggering school end times is a possible solution in some areas. (See proposed actions G3.8, G3.9)
- 2.1.65** The Council also promotes safer travel initiatives by promoting local Safer Travel at Night campaigns and promoting TfL's Cabwise which increases available information on licensed minicabs. (See proposed action G3.6)

G3 Proposed actions to be taken to improve the safety and security of all Londoners

- G3.1 Adopt the national and London casualty reduction targets and maintain an effective method of accident monitoring for the borough.
- G3.2 Prepare a three year programme of 20 mph zones in the borough and incorporate these into neighbourhood schemes for TfL funding. .
- G3.3 Reduce the number of motorcycle casualties in the borough through educational campaigns.
- G3.4 Prioritise schemes that maximise casualty reduction predictions and in particular the numbers killed and seriously injured per annum for the available finance.
- G3.5 Encourage safe and considerate driving, at appropriate speeds, as part of travel awareness and road safety education campaigns and review existing speed limit to ensure they are appropriate to the location.
- G3.6 Work with public transport providers and regulators as well as the Metropolitan Police in promoting safer travel initiatives such as Harrow's Safer Travel at Night and Cabwise - safer use of minicabs.
- G3.7 Reduce traffic volumes on local roads through traffic management techniques and where possible by diverting traffic to main arterial/distributor roads.
- G3.8 Work with schools and police to address perceptions of personal safety on buses.
- G3.9 Work with schools to consider staggering school end times by a variety of measures including encouraging more school to introduce before and after school activities.
- G3.10 Provide road safety education events at schools throughout the borough.
- G3.11 Provide cycle training for adults and children and encourage the use of bicycles generally and in particular for journeys to school
- G3.12 Ensure that the safety concerns of all road users are considered when considering any traffic scheme.
- G3.13 Work with the Metropolitan Police in using their powers of enforcement to deal with illegal cycling on pavements and footpaths.
- G3.14 Carry out safety audits of all new significant traffic and highway proposals.
- G3.15 Ensure speed activated signs are located at the most appropriate locations for reducing accidents.

Additional borough actions relevant to this goal are:

- H3.1 Monitor motorcycle casualties and develop a localised response to address locations where accidents arise prioritising actions according to the severity of casualties
- H3.2 In the development of all corridors and neighbourhoods, the council will follow the detailed guidelines as outlined in the road safety plan.

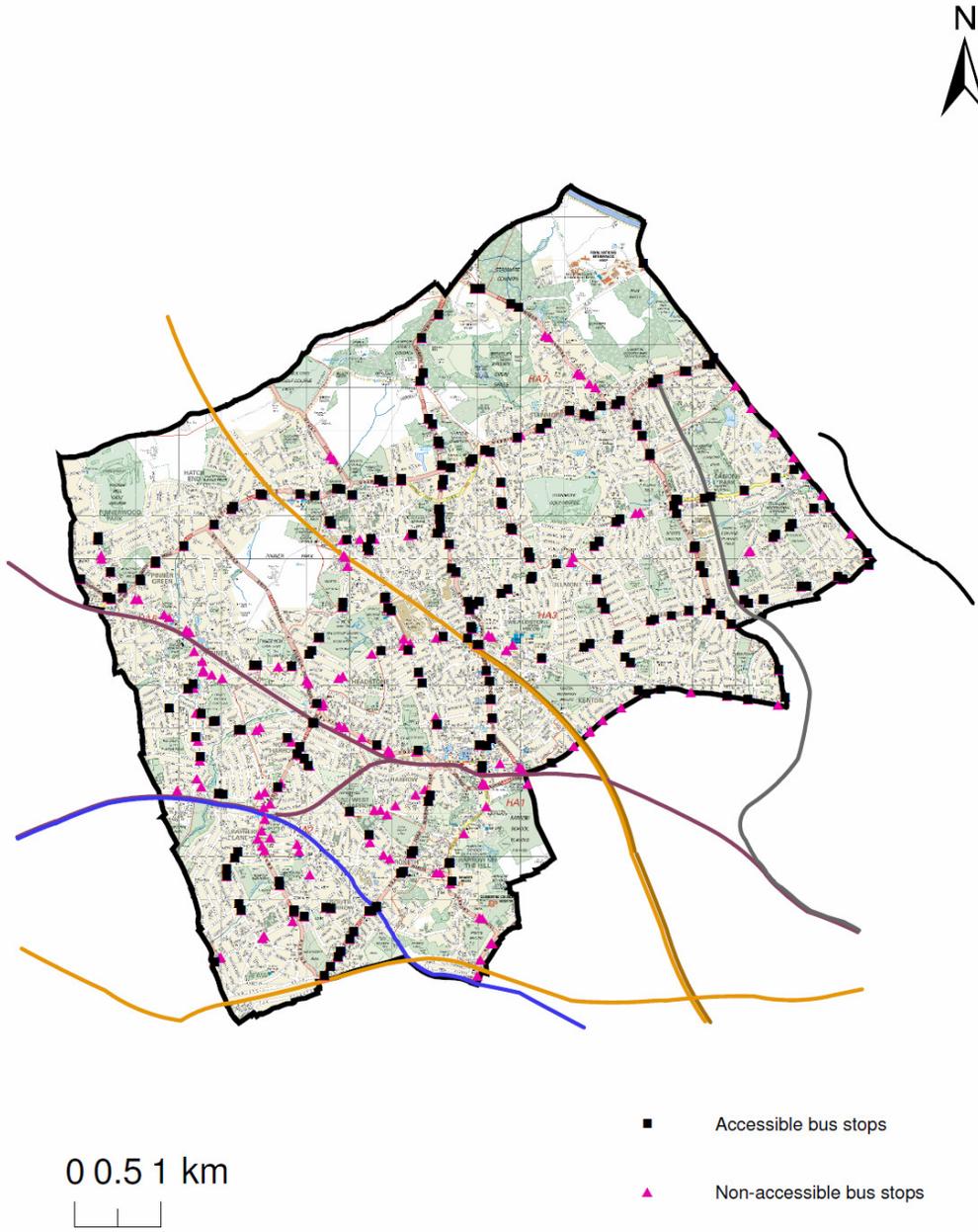
G4 MTS Goal: Improve transport opportunities for all Londoners

MTS Challenge: Improving accessibility

- 2.1.66 The lack of step-free access at Harrow on the Hill station is a major accessibility problem for the town centre, the whole borough and also the wider community who wish to use the facilities of the town centre. The lack of an accessible train station in a metropolitan town centre gives a poor first impression to many of those with mobility difficulties and discriminates against those seeking to access by tube Harrow town centre's retail, service, leisure and possible employment offers. This is a key concern for the borough and is also included as part of strategic objectives 5 and 7 in Harrow's core strategy. The borough will continue to lobby TfL to bring forward the necessary work to improve the accessibility of the

- station. The cost of the improvements required are prohibitive for the borough and should be considered as a priority for TfL in addressing the needs of outer London boroughs, particularly a borough with an increasingly elderly population. This is a key input into Harrow LIP2 objective 7. (See proposed action G4.1)
- 2.1.67** On a smaller scale but still of local significance, concerns regarding the accessibility of Stanmore station are also frequently raised by residents in Harrow. The problem at this location is that some improvements have been made but they fall well short of what is required for a station to be fully accessible.
- 2.1.68** Estimates suggest that in Harrow, by 2016, there will be 3,100 more people over the age of 65, including 500 more people aged 80-84 and 500 more people aged 85+ compared with 2008. There will also be an increasing number of older people living alone, living without their own transport and/or caring for someone whilst in poor health themselves. Transport within the borough needs to take this into account.
- 2.1.69** Improving accessibility of all public transport will benefit not just people with mobility difficulties, but also those carrying heavy shopping or those with pushchairs. Harrow has a programme of improving bus stop accessibility and increasing the number of bus stops which are DDA compliant. Supporting accessibility improvements at all stations is part of Harrow's core strategic objective 7 and is key to social inclusion in the borough. This again is a key input into Harrow LIP2 objective 7. (See proposed actions G4.2, G4.3)
- 2.1.70** Because many people with mobility difficulties are car dependent, all scheme design needs to ensure that it fully considers their needs in particular regarding access to shops or other facilities. It is also important that schemes prevent or deter parking on footways or verges that hinder pedestrians, those with visual impairment or in wheelchairs from conveniently passing the location. (See proposed actions G4.4, G4.6)
- 2.1.71** For people with poor mobility, even a short walk to the shops can be hampered by the lack of public seating. Independence and health of people with mobility difficulties is often worsened by their dependence on motorised transport. A road side seat appropriately located can make all the difference in such situations. A walk to the shops can be made independently if there is a seat to rest located en route to the final destination. (See proposed action G4.9)
- 2.1.72** The Shopmobility services in both Harrow town centre provide a much needed service loaning out manual and powered wheelchairs and powered scooters for those shopping in the town centres. Walkers, walking sticks, blankets, shopping bags, cushions, rain capes and children's wheelchairs are also provided by this service. All of the equipment provided by Shopmobility service is also available for users for longer than just the single shopping visit. The service is predominantly managed by volunteers and funded through grants. Without the equipment loaned out by Shopmobility services, many people would simply be unable to use the town centre facilities. Shopmobility services are only open as long as volunteers continue to provide the service. Expansion of their services and operating hours needs to be considered. (See proposed action G4.5)
- 2.1.73** Accessibility for people with mobility problems in Harrow is also supported by Harrow Community Transport. Harrow Community Transport provides Harrow residents with mobility problems a bookable fully accessible transport service delivered to a very high standard. All their vehicles are available for use to registered user groups from the voluntary and community sector together with statutory bodies such as the social services. The organisation provides a vital service to those unable to use public transport.

Figure 2-4: Bus stop accessibility map



DIGITAL MAP DATA (C) COLLINS BARTHOLOMEW LTD (2007)

MTS Challenge: Supporting regeneration and tackling deprivation

- 2.1.74** Although Harrow does enjoy comparatively high employment levels and household earnings, and has some areas of considerable affluence, there are some significant pockets of deprivation. This is particularly so in central and southern parts of the Borough which include neighbourhoods that are within England's 20% most deprived, against Government measures of multiple and income deprivation.
- 2.1.75** A priority for the borough will be tackling the causes of deprivation, so that all residents can benefit from economic development within the Borough and access the growth in employment opportunities that will emerge elsewhere in London. To this end, the affordability of public transport is a major concern.
- 2.1.76** As mentioned in Harrow's core strategy, the identification of Harrow and Wealdstone town centres as the focus of regeneration and the inclusion of key employment areas in the Intensification Area, will assist in improving business confidence in Harrow and create an environment that will attract inward investment. Improved walking, cycling and public transport links will be improved throughout the borough but particularly within the Intensification Area. In addition, Harrow's SCS identifies the need to promote the regeneration of Harrow Town Centre by increasing its retail offer, creating a distinctive public space and securing a 21st century transport hub. This is a key input into Harrow LIP2 objective 5.
- 2.1.77** All upgrades to infrastructure and scheme redevelopment offer some level of regeneration for the borough. The borough will develop a three year rolling strategic programme for corridors and neighbourhood scheme improvements. Major scheme improvements are also planned for West Harrow and along Northumberland Road. (See proposed action G4.7, G4.8)

G4 Proposed actions to be taken to improve transport opportunities for all Londoners

- G4.1 Petition TfL to bring forward improved accessibility of Harrow on the Hill station as a priority in support of Harrow town centre and to facilitate the levels of growth proposed for the Harrow & Wealdstone Intensification Area, and improve the accessibility of all other stations where there is no disabled access
- G4.2 Seek to ensure that all stations and bus stop locations in the Borough are progressively improved as a basis for supporting a network of fully wheelchair-accessible scheduled bus services.
- G4.3 Increase the number of bus stops in the borough which are DDA compliant.
- G4.4 Prioritise in all schemes, the needs of those with mobility difficulties who need to drive to work, shops or other facilities.
- G4.5 When financially possible, continue to support of the expansion of the Harrow Shopmobility services and their opening hours.
- G4.6 Where alternative options exist, prevent or deter parking on footways and verges ensuring that the safety and convenience of pedestrians, the visually impaired and disabled people is paramount.
- G4.7 Develop a three year rolling strategic programme for corridors and neighbourhood scheme improvements.
- G4.8 Develop a three year rolling major schemes programme that considers area improvements on a holistic basis. Improvements in Mollison Way and Rayners Lane are major schemes currently being developed. Future major schemes currently under consideration include improvements on Station Road in the Area of Intensification, West Harrow and along Northumberland Road. More details are provided in section 3.7 - Major schemes.
- G4.9 Take into account the needs of those with mobility difficulties who would benefit from additional seating in all new schemes giving particular consideration to road side seating in areas beyond the town centres which would enable many people to take short walking trips outside their own homes.

Additional borough actions relevant to this goal are:

- H4.1 Work towards introducing a fully integrated, accessible bus and underground station at Harrow on the Hill.
- H4.2 Improve pedestrian linkage between Harrow town centre and Harrow on the Hill. This may include the provision of a pedestrianised bridge with disabled access, over the railway connecting the town centre to Lowlands recreation ground and Harrow college which will mitigate ticket hall congestion
- H4.3 In the development of parking schemes, the council will ensure convenient car parking for people with disabilities is considered

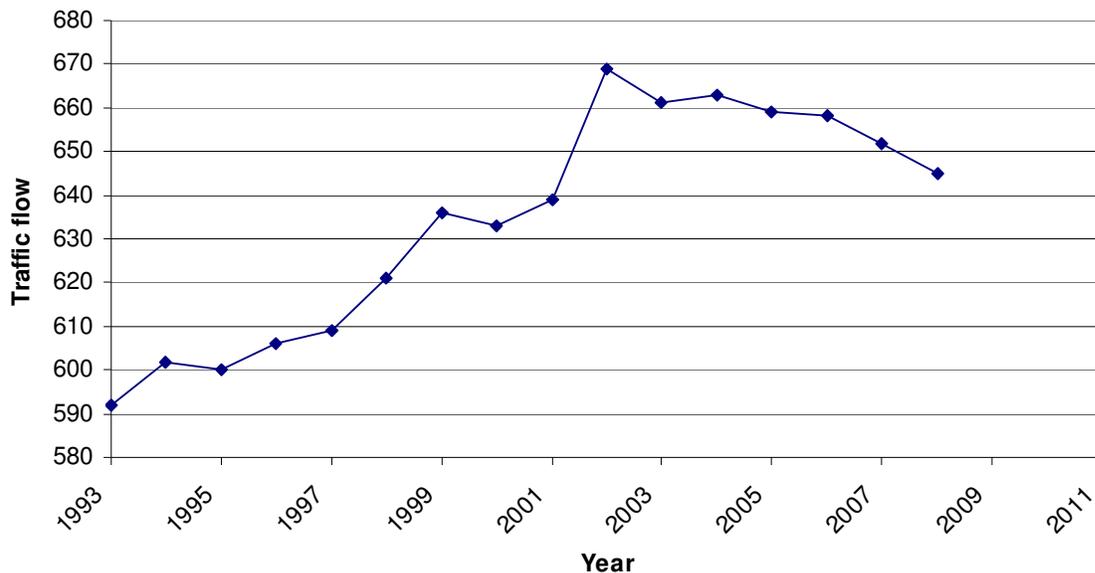
G5 MTS Goal: Reduce transport's contribution to climate change and improve its resilience

MTS Challenge: Reducing CO₂ emissions

- 2.1.78 The greenhouse effect is a natural phenomenon in which naturally occurring gases trap the sun's energy and warm the planet. The main greenhouse gas is carbon dioxide, CO₂. Climate change is happening because of an increase in greenhouse gases – predominantly carbon dioxide – caused by human activity such as the burning of fossil fuels and deforestation.
- 2.1.79 The Climate Change Act sets a target to reduce national CO₂ emissions by 80% by 2050 – compared to a 1990 baseline. This excludes emissions from international shipping and aviation. All local authorities are expected to meet targets for their own emissions under the Carbon Reduction Commitment.
- 2.1.80 The Mayor for London also issued a Climate Change Strategy to address this issue. The Climate Change Action Plan sets a target for London to limit its total carbon dioxide emissions to 600 million tonnes between now and 2025 – a reduction of 4% per annum.
- 2.1.81 Excluding aviation and shipping, transport accounts for 22% of all carbon emissions in London. If we reduce car use we reduce carbon emissions. If people walk and cycle in place of driving then we not only reduce emissions but are healthier as a result of the exercise. (See proposed action G5.6)
- 2.1.82 Since 2002, traffic volumes have been reducing in Harrow. The improvements in vehicle technology along with the reduction in traffic flow will both help reduce transport's contribution to climate change.
- 2.1.83 Included in Harrow's core strategy as part of strategic objective 4 is the need to seek to curtail increases in transport-based CO₂ emissions by promoting commercial and residential development in locations that reduce the need to travel by car and promote more sustainable modes of transport. We need to promote mixed use development in growth locations, promote growth around areas of greatest public transport, promote travel plans and help others organisations to develop travel plans, tackle school transport and secure deliverable travel plans for all major trip generating development. (See proposed actions G5.1, G5.2, G5.3, G5.4, G5.5)
- 2.1.84 The Council corporate target is to make an annual saving of 4.0% on our carbon footprint. Although most of this will be done by targeting buildings that have high energy footprints and low thermal efficiency, transport is still part of this equation. Reduction of CO₂ from the Council's fleet is a council corporate target. Fleet vehicles which have not yet been ordered

will be required to demonstrate in the procurement process the measures that will reduce CO₂ emissions. In addition, the waste management fleet was renewed in 2008/9. Euro V diesel engines were specified. Similarly emissions of NO_x will also be reduced when purchasing new council vehicles.

Harrow motor vehicles traffic flow



2.1.85 In Harrow, progress has been made in reducing the school car run. There has been a 6% reduction in car use for journeys to school since 2007/8 (NI198).

MTS Challenge: Adapting to climate change

2.1.86 Climate change is a global issue but also a significant local challenge. If we do not address this issue, the Earth's climate will change significantly. We need to meet the challenge to ensure that development is sustainable and the well-being of future generations is safeguarded. The environmental, social and economic impacts of climate change are already measurable and these are predicted to continue and to grow in severity.

2.1.87 The Nottingham Declaration was signed by Harrow council on 25 July 2007. By signing it the Council acknowledged "that evidence shows that climate change is occurring and that it will continue to have far reaching effects on the UK's people and places, economy, society and environment."

2.1.88 The Harrow SCS and Harrow's Core Strategy both recognise the needs to adapt to the impact of climate change and in particular the need for sustainable development and the need to reduce the contribution of transport emissions.

2.1.89 Changing the types of vehicles we use to less polluting vehicles and encouraging others to do the same is a small adjustment we need to ensure takes place in order to address this challenge. This is a key input into Harrow LIP2 objective 9. (See proposed actions G5.7, G5.8)

- 2.1.90 Planting trees releases oxygen for us to breathe; absorb carbon dioxide (thereby reducing the greenhouse effect); filter air and absorb other pollutants such as ozone, nitrogen oxides and sulphur dioxides, carbon monoxide, smoke, dust, ash and noise. (See proposed action G5.9)

G5 Proposed actions to reduce transport's contribution to climate change and improve its resilience

- G5.1 Encourage modal shift towards more sustainable forms of transport.
- G5.2 Promote mixed use development in growth locations to reduce the need to use a vehicle for trips between residential, retail, leisure and employment areas.
- G5.3 Promote growth in areas of greatest public transport to encourage residual travel by public transport, walking and cycling.
- G5.4 Promote the use of travel plans for all educational establishments, businesses, hospitals and other places of work and where appropriate work with organisations to improve site specific travel plans.
- G5.5 Secure deliverable travel plans for major trip generating development.
- G5.6 Work with schools to reduce the number of school trips made by car and liaise with schools regarding suggested highway works required in school locality.
- G5.7 Request all providers or users of transport fleets to consider how they can move towards the use of less polluting vehicles.
- G5.8 Pursue the viability of introducing a revised parking permit structure based on vehicle emissions.
- G5.9 Seek opportunities for new tree planting in the Intensification Area.

Additional borough actions relevant to this goal are:

- H5.1 Improve the Council travel plan to reduce the need for staff or visitors to travel by car and review options for securing parking and improved facilities for bicycles, electric vehicles, motorcycles, car club vehicles and car share vehicles
- H5.2 Encourage the use of cleaner and more environmentally friendly vehicles through prioritising specific facilities for parking of "greener" vehicles at all council owned car parks, e.g. providing specific locations for parking providing charging points for electric vehicles
- H5.3 Encourage the use of more environmentally friendly vehicles through the provision of reduced cost parking permits for appropriate vehicles and electric charging points
- H5.4 Provide effective alternatives to the car to encourage modal shift and increase provision for non-motorised modes of travel including cycling on all local access roads and treating walking as a priority travel mode, to be treated on a par with other means of transport

G6 Support delivery of the London 2012 Olympic and Paralympic Games and its legacy

MTS Challenge: Developing and implementing a viable and sustainable legacy for the 2012 Games

- 2.1.91 Like the rest of London, Harrow Council welcomes holding the 2012 Games in London. As a result of the Olympics coming to London, Harrow aims to achieve the following:

- A. A more active, healthier population who are inspired by participation in the range of 2012 events to access a range of public, private and mixed economy leisure activities that work together.
- B. To be recognised as a destination for heritage, arts, leisure, entertainment and open space by local and visiting tourists
- C. Increase in the number of residents volunteering to support and serve their local community
- D. Increased opportunities to build stronger communities through participation in arts, sports, culture, heritage and volunteering
- E. Easier and more co-ordinated ways for residents to find out about arts, sports, culture, heritage and volunteering opportunities
- F. An active community and third sector experienced at working together to deliver opportunities like those provided by London 2012
- G. Engagement with London-wide transport and environmental improvement programmes required for the delivery of London 2012
- H. Recognised as a borough that supports and celebrates the achievements of disabled people.
- I. Inspiring examples of young people's participation and achievement in programmes designed and driven by them and the many other opportunities
- J. More prosperous local economy, who are inspired by participation in the range of 2012 events

2.1.92 Further details regarding Harrow and the 2012 Olympic and Paralympic Games are available on Harrow's website www.harrow.gov.uk.

2.1.93 In the run up to and during the games, Harrow sustainable transport campaign will celebrate the games coming to London via a series of activities tied in with health clubs, sustainable transport promotions and the Olympics. In 2012, sustainable transport promotions will be merged with Olympic events highlighting Harrow's sustainable community.

2.1.94 The key legacies to Harrow from the Olympic and Paralympic Games will be from the benefits of additional tourism and from public increased sporting participation thereby resulting in a healthier population. The transport legacy from the Games will be that which is provided by TfL, such as Crossrail, that benefits all of London.

2.2 Setting Harrow's objectives

2.2.1 Harrow has developed a set of locally-specific objectives that reflect Mayoral, sub-regional and local priorities. These will be useful in directing our work programme and in increasing understanding and transparency as to how we do so.

2.2.2 These objectives have been developed after considering the challenges faced as identified in the previous section and having considered the Borough's Core Strategy and the Borough's SCS.

2.2.3 The Core Strategy is a key part of the Borough's Local Development Framework (LDF). The LDF is the plan which shapes decisions about services and facilities needed for future growth. The Core Strategy provides the long term vision for the Borough and the spatial plan for the co-ordination and delivery on how the provision of housing, jobs, public services, transport, leisure and cultural facilities pursuant to the vision. This is particularly useful as the Core Strategy has undergone several stages of public consultation within the borough and revised accordingly.

2.2.4 The SCS is a document which looks to the future of Harrow; it sets out the future priorities for the borough co-ordinate the delivery of relevant infrastructure pursuant to it. It is based on discussions and interviews with significant opinion-formers with specialist knowledge about current and future policy, local groups and community representatives.

2.2.5 The objectives identified reflect the timeframe of the MTS (i.e. to 2031).

2.2.6 Harrow's LIP2 objectives

1. To enable Harrow's residents to have the best possible access to employment opportunities and to improve the attractiveness of Harrow as a place to live, visit and work, the borough will further develop the transport system to provide access to employment opportunities within and beyond the borough and also support improved access to a wide range of facilities such as retail centres and education and health services as well as access to cultural heritage and outdoor green spaces
2. Support improved orbital transport links across the Borough and between outer London centres thereby providing greater access to a wider catchment area for employment opportunities by enabling journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment
3. Encourage a healthier lifestyle by promoting healthy and safe travel particularly for pedestrians and cyclists
4. Reduce CO₂ emissions in Harrow, increase environment sustainability, improve general health and deliver a better quality of life in the borough through the use of travel planning and appropriate traffic engineering measures including providing improved facilities for pedestrians and cyclists
5. Support the borough's economic growth by regenerating Harrow Town Centre and the new Area of Intensification and ensure that the transport delivery needs of the Area of Intensification are prioritised
6. Reduce the number of motorcycle casualties across the borough
7. Improve social inclusion in the borough by improving the quality, capacity and accessibility of Harrow-on-the-Hill station and Harrow bus Station and improving the accessibility, efficiency and attractiveness of all transport including public transport borough wide and in particular Transport for London stations
8. Support projected population growth within the new Intensification Area by improving transport connectivity between Harrow-on-the-Hill station/Harrow bus station and Harrow & Wealdstone station
9. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change
10. Support Harrow's local economy by reducing congestion, improving the efficiency of servicing and delivery and making essential car journeys easier
11. Improve the quality of life of residents and visitors and improve overall health the borough will improve pedestrian walkways that use and link existing parks and open spaces with town centres and public transport provision
12. Ensure that the vitality of the town centre is supported through good transport access via all modes of transport prioritising sustainable modes of transport

2.3 Link between Mayoral goals and Harrow's objectives

The following table shows that Harrow's objectives are in line with the Mayor's goals.

Table 2-2: Link between Mayor's goals and Harrow's objectives

	Mayoral goal	Economic development and population growth	Quality of life	Safety and security	Transport opportunities for all	Contribution to climate change
	Harrow objectives (abbreviated)					
1.	Provide access to employment opportunities within and beyond the borough and also support improved access to a wide range of facilities such as retail centres and education and health services as well as access to cultural heritage and outdoor green spaces	✓			✓	
2.	Support proposals for improved orbital transport links across the Borough and between outer London centres to support a wider catchment area	✓	✓		✓	✓
3.	Promote healthy and safe travel particularly for pedestrians and cyclists		✓	✓	✓	✓
4.	Reduce CO ₂ emissions in Harrow, increase environmental sustainability, improve air quality and deliver a better quality of life through the use of travel planning and appropriate traffic engineering including providing improved facilities for pedestrians and cyclists		✓		✓	✓
5.	Regenerate Harrow Town Centre and new Area of Intensification and ensure that the transport delivery needs of the Area of Intensification are prioritised	✓	✓			
6.	Reduce the number of motorcycle casualties across the borough		✓	✓		
7.	Improve the quality, capacity and accessibility of Harrow-on-the-Hill station and Harrow bus Station and improve the accessibility, efficiency and attractiveness of all transport including public transport borough wide and in particular Transport for London stations	✓	✓	✓	✓	✓
8.	Improve transport connectivity between Harrow-on-the-Hill station/Harrow bus station and Harrow & Wealdstone station	✓	✓		✓	✓
9.	Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change		✓			✓

10	Improve the efficiency of servicing and delivery, reduce congestion and make essential car journeys easier	✓	✓			
11	Improve pedestrian walkways that use and link existing parks and open spaces with town centres and public transport provision		✓		✓	✓
12	Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport	✓				

2.4 Link between Harrow's SCS and Harrow's LIP2 objectives

2.4.1 Harrow's SCS has a vision, short term actions and ambitions for 2020 divided up into six key themes. These are shown in

2.4.2 Table 2-3. Following this the link between Harrow's objectives and the SCS and the West London sub-regional transport plan is shown in

2.4.3 Table 2-4. This shows that Harrow's LIP2 objectives are in line with Harrow's SCS.

Table 2-3: Harrow in 2020

<p>ECONOMIC DEVELOPMENT IN HARROW</p> <p><u>Jobs Demand More Highly Skilled Employees</u></p> <ul style="list-style-type: none"> ▪ There are practical opportunities available to prepare people for work ▪ Harrow residents are supported to relearn and retrain <p><u>No large industrial or commercial employers</u></p> <ul style="list-style-type: none"> ▪ Harrow continues to attract and support small businesses ▪ Local work opportunities continue to be available ▪ There is provision and access to outer borough employment opportunities ▪ Harrow continues to have a strong retail and service sector 	<p>AN IMPROVING ENVIRONMENT</p> <p><u>Environmental Issues</u></p> <ul style="list-style-type: none"> ▪ Harrow has attractive, sustainable and accessible transport ▪ Open space and environmentally sensitive areas are protected ▪ Harrow is well designed, with sustainable buildings, public spaces and transport ▪ Harrow is clean with high standards of waste recycling and reuse ▪ The effects of climate change and adverse air quality are mitigated <p><u>Growing Population</u></p> <ul style="list-style-type: none"> ▪ Harrow's environment is sustainable ▪ Implications of overcrowding and increased density are minimised ▪ There is better access to a range of appropriate housing
<p>EVERY HARROW CHILD</p> <ul style="list-style-type: none"> ▪ Children and young people continue to have access to education opportunities ▪ Social opportunities are available ▪ Children and young people are healthy and safe ▪ Children and young people are heard and consulted ▪ Children and young people are supported to make a positive contribution and take responsibility 	<p>CULTURE, COMMUNITIES AND IDENTITY</p> <ul style="list-style-type: none"> ▪ Harrow's diverse community is celebrated and valued ▪ Communities work together to help themselves ▪ There is a balance between universal and separate services for our communities ▪ People feel safe ▪ Individuals are treated with dignity and respect
<p>HEALTH, WELLBEING AND INDEPENDENCE</p> <ul style="list-style-type: none"> ▪ Health inequalities are reduced ▪ There is an increase in preventative services ▪ Independent living is promoted and supported (choice, control and empowerment) ▪ Recognition and improved support to carers ▪ Isolation and marginalisation is reduced ▪ There is increased involvement in sport and art activities 	<p>THE FUTURE OF PUBLIC SERVICES AND DEMOCRACY</p> <ul style="list-style-type: none"> ▪ Harrow has a strong and respected partnership ▪ Services are personalised and neighbourhood focused ▪ The community is engaged in the development and delivery of services ▪ Residents and stakeholders have the ability to have real influence ▪ The Voluntary and Community Sector is strengthened

Table 2-4: Link between Mayor's goals and Harrow's SCS and West London sub-regional transport plan goals

		SCS theme					West London sub-regional transport plan goals					
		Economic Development	Every Harrow Child	Health Wellbeing and Independence	An Improving Environment	Culture, Communities and Identity	The future of public services and democracy	Improve north-south connectivity	Improve access to, from and within key locations	Enhance east-west capacity and manage congestion	Enhance the efficiency of freight movements in the sub-region	Improve land-based air quality
Harrow objectives												
1.	Ensure that the transport system provides access to employment opportunities within and beyond the borough and also supports improved access to a wide range of facilities, such as retail centres and education and health services as well as access to cultural heritage and outdoor green spaces	✓	✓	✓	✓	✓	✓	✓	✓			✓
2.	Support improved orbital transport links across the Borough and between outer London centres thereby providing greater access to a wider catchment area for employment opportunities by enabling journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment	✓		✓	✓				✓	✓	✓	✓
3.	Promote healthy and safe travel particularly for pedestrians and cyclists		✓	✓	✓		✓		✓			✓
4.	Reduce CO ₂ emissions in Harrow, increase environmental sustainability, improve air quality and deliver a better quality of life through the use of travel planning and appropriate traffic engineering including providing improved facilities for pedestrians and cyclists	✓	✓	✓	✓		✓					✓

		SCS theme						West London sub-regional transport plan goals				
		Economic Development	Every Harrow Child	Health Wellbeing and Independence	An Improving Environment	Culture, Communities and Identity	The future of public services and democracy	Improve north-south connectivity	Improve access to, from and within key locations	Enhance east-west capacity and manage congestion	Enhance the efficiency of freight movements in the sub-region	Improve land-based air quality
5.	Regenerate Harrow Town Centre and new Area of Intensification and ensure that the transport delivery needs of the Area of Intensification are prioritised	✓			✓	✓	✓		✓		✓	✓
6.	Reduce the number of motorcycle casualties across the borough			✓								
7.	Improve the quality, capacity and accessibility of Harrow-on-the-Hill station and Harrow bus Station and improve the accessibility ,efficiency and attractiveness of all transport including public transport borough wide and in particular Transport for London stations	✓	✓	✓	✓	✓			✓			✓
8.	Improve transport connectivity between Harrow-on-the-Hill station/Harrow bus station and Harrow & Wealdstone station	✓			✓			✓	✓	✓	✓	✓
9.	Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change	✓	✓	✓	✓	✓	✓		✓	✓		✓
10	Improve the efficiency of servicing and delivery, reduce congestion and make essential car journeys easier	✓	✓	✓	✓	✓			✓	✓	✓	
11	Improve pedestrian walkways that use and link existing parks and open spaces with town centres and public transport provision		✓	✓	✓				✓			✓

		SCS theme					West London sub-regional transport plan goals					
		Economic Development	Every Harrow Child	Health Wellbeing and Independence	An Improving Environment	Culture, Communities and Identity	The future of public services and democracy	Improve north-south connectivity	Improve access to, from and within key locations	Enhance east-west capacity and manage congestion	Enhance the efficiency of freight movements in the sub-region	Improve land-based air quality
12	Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport	✓		✓	✓			✓				✓

3. Delivery Plan

3.1 Potential Funding Sources

3.1.1 The following table shows estimated financial contributions to delivering the work identified in LIP2.

Funding source	2011/12 (£k)	2012/13 (£k)	2013/14 (£k)	Total (£k)
Integrated Transport				
LIP formula funding allocation	1,749	1,678	1,438	4,865
Harrow Local Transport Fund	100	100	100	300
Council Capital/Revenue funds	280	180	140	600
Developer contribution	195		280	225
Total	2,324	1,958	1,958	6,240
Maintenance				
LIP allocation principal roads	624	500	500	1,498
Total	624	500	500	1,498
Major schemes				
Mollison Way	1,000			1,000
Rayners Lane - LIP	150			150
Rayners Lane - Developer contribution	25			25
Northumberland Road		100	900	1,000
Station Road Intensification Area			100	100
SUSTRANS greenway route (Funding is for all boroughs not just Harrow)		200	1,000	1,200
Total	1,175	300	2,000	3,475

3.2 Prioritisation Framework

3.2.1 As a result of frequent public communication and consultation, Council members and officers have developed a wealth of information regarding the needs of Harrow residents, visitors and businesses. Ideas as to how to address the issues of concern are frequently discussed within the department. All works identified fit within the objectives identified in this document. There is simply not enough money available to do all the work required so the Council needs to develop a programme of works within the limited budget available.

- 3.2.2 As long as designers are fully aware of the delivery requirements of the MTS goals and high profile outputs these can be included in nearly all schemes to be implemented. This is the case for walking and cycling improvements, cycle parking and tree planting which can all be considered holistically with all scheme improvements.
- 3.2.3 The Council is developing a database system to identify all types of works requested through communication with the public, councillors, schools etc. This enables good records to be kept regarding identified safety issues, freight issues, congestion and journey time issues, speeding issues etc., and enables reports to be prepared to help identify local and area specific interventions.
- 3.2.4 Harrow considers reducing casualties and improving overall accessibility to be the most important work of the transportation section and prioritises schemes that can improve these above all others. In particular reducing the numbers killed and seriously injured and the number of motorcycle, cycling and child casualties is of most importance to the borough.
- 3.2.5 In general, the way the borough chooses to prioritise work is based on the following factors:
- Likely impact on the number of people killed or seriously injured
 - Impact on accessibility particularly individual accessibility
 - Impact on air quality, public transport, congestion and journey time
 - Scheme deliverability
 - Public support of change
 - Impact on achieving borough transport objectives / Mayor's Transport goals
 - Changes to council priorities
 - Overall compliance with and delivery of the Borough's spatial plan
- 3.2.6 Where schemes are suggested and funding not available, officers and members discuss the impact of delaying specific schemes. In such cases, safety is considered as the key priority issue.
- 3.2.7 Prioritising the implementation of some schemes will most likely need to be made over the life time of this LIP. These may be necessary as a result of economic downturn; lack of revenue/capital funding; unexpected changing accident patterns as well as other factors which are currently unpredictable. If this is necessary, safety improvements will be of highest priority.

3.3 Achieving Harrow's objectives

- 3.3.1 This section will address how we will work towards achieving all of our objectives. In carrying out all work required, the borough needs to consider the environmental impact of works. The interventions identified will be delivered by April 2014 unless otherwise stated.

Objective 1

To enable Harrow's residents to have the best possible access to employment opportunities and to improve the attractiveness of Harrow as a place to live, visit and work the borough will further develop the transport system to provide access to employment opportunities within and beyond the borough and also support improved access to a wide range of facilities such as retail centres and education and health services as well as access to cultural heritage and outdoor green spaces

- 3.3.2 In order to achieve this objective, the Council needs to ensure that upgrades to public transport are realised. The borough works with TfL to help ensure the delivery of all

improvements and also works to ensure that the needs of Harrow residents and businesses are fed back to TfL to be incorporated into their route design and timetables.

- 3.3.3** The borough regularly reviews gaps in the provision of the local bus service. Any location where the local bus service is more than 5 minutes walk away is considered to be inaccessible. When such locations are identified this is fed back to TfL. Following this, route changes may be recommended by Harrow officers and Harrow will then argue the case for them to be introduced. The final decision for route changes remains within TfL.
- 3.3.4** Harrow officers also talk to public transport providers and operators in order to influence them to provide services that connect to key destinations. The direct rail connection from Harrow and Wealdstone station to Gatwick airport was withdrawn and is a link that residents have requested to be reinstated. Harrow continues to work towards influencing the reinstatement of this direct link.
- 3.3.5** The Green Grid concept, supported by the Mayor of London, aims to create a network of interlinked, multi-functional and high quality open spaces that connect with town centres, public transport nodes, the countryside in the urban fringe, the Thames and major employment and residential areas. Harrow intends to use the green grid links identified to identify cycle links which will improve access. Where possible, identified links will be brought into the corridors and neighbourhoods programmes.
- 3.3.6** The Belmont Trail is a disused railway line which runs for 2.5km north south in the borough. The trail links Byron Recreation ground with Stanmore Golf club via Belmont Circle. The route also links several schools in the borough including: Stanburn First school, Stanburn Junior school, Whitchurch infant and nursery school, Whitchurch junior school, St Josephs Catholic primary school, Belmont school, Elmgrove infant and Nursery school and Elmgrove junior school. Since 2009, the Council has been making small scale improvements along this link and this will continue over the coming years. The intention is that the entire route will become cycle friendly and more attractive to local walkers. Waymarker signs for the route have been introduced, some ground levelling work and rubbish clearance taken place. Future work includes improved pedestrian and cycle signage, nature improvements and a new management plan for the trail.

Objective 2

Support improved orbital transport links across the Borough and between outer London centres thereby providing greater access to a wider catchment area for employment opportunities by enabling journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment

- 3.3.7** The Council works with other West London boroughs to address the importance of orbital transport and to ensure that orbital links are appropriately prioritised for service improvement.
- 3.3.8** Specifically, Harrow will be working with other West London boroughs and TfL to do the following:
- Feasibility study for route 186 to provide a new limited-stop FastBus quality service between Harrow and Edgware along the existing route service.
 - Consider the impact of High Speed 2 (HS2)* rail connections to Heathrow and the potential interchange with Crossrail at Old Oak Common or Iver Parkway. If Old Oak Common is the selected interchange location, then a further Crossrail station would

* High Speed Two Limited (HS2 Ltd) is the company set up by the Government in 2009 to consider the case for new high speed rail services between London and Scotland.

be needed at the station. West London including Harrow favours the interchange at Old Oak Common which will have significant benefits for the whole area.

- Enhance crowded bus corridors through the facilitation of bus lanes and enhanced bus priority work at traffic signals where possible on route 140. This has the potential to save bus journey times from Harrow to Heathrow by 10 minutes.

3.3.9 Harrow will also be using the Transport and Enhanced Emissions Model (TEEM) to estimate the environmental impacts of specific scenario changes for example, improvements to West London orbital routes resulting in modal shift, emissions gains traffic flow changes.

3.3.10 The London Cycle Network is a 900km of safer, faster cycle routes through the Capital. It was predominantly completed in 2010 and provided many good safe links for cyclists throughout London. Cycle links on this network in Harrow that were not completed will still be completed where they provide an improved orbital link.

Objective 3

Encourage a healthier lifestyle by promoting healthy and safe travel particularly for pedestrians and cyclists

3.3.11 Delivering the Harrow's ROWIP Statement of Action will help to achieve this objective. The Statement of Action includes proposals to:

- Promote and co-ordinate guided walks identified in Harrow Biodiversity Action Plan, health walks and nature walks as well as other walking activities in Harrow.
- Promote the London Loop, the Capital Ring and the Belmont Trail identifying links to public transport
- Introduce clear and consistent signage throughout Harrow's strategic walk network

3.3.12 Harrow also intends to promote the recently developed Harrow Weald nature trail. This will include further signage including interpretation panels on wildlife and the history of the trail.

3.3.13 The borough wants to improve walking amenities within all of Harrow's green belt in the north of the borough. This will include replacing stiles, new signage and new kissing gates where applicable. This will then improve the link with the new Harrow Weald Common Nature Trail and the Belmont Priory circular walk.

3.3.14 Further improve the Belmont Trail infrastructure to improve walking and cycling will take place over the coming years.

3.3.15 The borough will encourage schools to review their own school travel plans and to achieve the TfL accredited status where possible. The borough will also help to address the traffic problems associated with the school run by supporting events such as Walk to School Week, Walk to School Month, Walk on Wednesdays, Theatre in Education and encouraging school walking buses.

3.3.16 In addition, the borough will continue supporting schools by providing some additional funding for the type of initiatives that promote this objective. This may include additional cycle parking, electronic school gates to separate pedestrians from cars, providing parent shelters for parents walking and waiting to collect their children from school and providing local incentives to encourage children to take sustainable modes of travel to school.

3.3.17 Harrow Council has created a resource to encourage sustainable travel on the journey to school. The aim is to ensure the information of a school's locality and transport links are readily available to all pupils, parents and staff. This has been achieved through the creation of a Travel Map for each School in the Borough. Each map identifies key infrastructure in the local area surrounding the school. This includes bus stops and bus routes, train stations,

local cycle routes, school keep clear markings and park entrances. The map also includes an 800m cordon around the school; it has been suggested that if a family lives within this zone ideally they should be walking to school. The Travel Maps have been designed for display in a highly visible location such as notice boards and school foyers. Schools are offered a postcode mapping service that shows the origin of school trips made by pupils attending the school.

- 3.3.18** Harrow has commissioned a new School Travel Plan website which will assist schools in developing their travel plans. The website will enable schools to map school journeys for each pupil by mode of travel. This allows the school to better coordinate their services. The less time they spend developing and reviewing their school travel plan, the more time the school can spend implementing identified initiatives to increase sustainable travel modes.
- 3.3.19** To further promote healthy and safe travel to school, the borough produces a quarterly newsletter for all schools in the borough. Information in the newsletter promotes best practice across the borough and provides ideas for schools to implement. It also promotes future events and initiatives being undertaken by schools in the borough. The newsletter regularly includes information on road safety and travel awareness.
- 3.3.20** 20mph zones not only improve the safety of an area, but also improve the perception of safety. 20mph zones are generally introduced around schools to reduce the risk to school children from accidents with speeding traffic. Harrow will continue to introduce 20mph zones around schools and this in turn will give pupils the confidence to walk and cycle to their school. By 2013/14, Harrow intends to introduce 20mph zones around each of the following schools: Cannon Lane school, Priestmead school, Roxbourne school, Elmgrove school, Weald school and Belmont school.
- 3.3.21** The Council promotes sustainable travel and healthy ways to travel, to work places and to residents through workplace travel plans and a series of events under the umbrella of a smarter travel campaign. The promotions are tied in with many wider London initiatives. Events will be developed in conjunction with NHS Harrow and links will be made between transport and health through aggressive promotion of active travel initiatives tied in with the borough's Sports Development team.
- 3.3.22** Harrow was the first borough in London to have a social media strategy. The strategy enables the borough to engage with customers in new ways such as through Twitter and linked in to Facebook. The borough received the Smarter Travel Innovative Project of the Year award in 2010 for the campaign's use of social media and forward thinking. The borough will continue to use social media to target youth in Harrow and encourage travel behavioural change.
- 3.3.23** With regards to the business community, we will also continue to monitor and promote the Barclays Cycle Hire scheme and ways of maximising efficiency through its use, highlighting to businesses how cycling can be an effective and cost efficient solution for short journeys. We will also encourage businesses to utilise social media to engage with the council on cycle parking, cycle safety issues and to encourage employee cycling. Through workplace travel plans and information seminars Harrow will highlight electric vehicles and their benefits to local businesses, supporting the installation of charging points.
- 3.3.24** To promote walking, the borough will be training up walk leaders and encourage as many voluntary led walks as feasible. These will be promoted in a variety of ways, but predominantly through internet advertising.
- 3.3.25** The borough will promote recreational cycling and encourage new cyclists through adult cycle training event which will be individually adapted to the skills level of the cyclist. Cycling will

also be promoted through the distribution of a cycle skills audit map showing the skills needed to cycle in various areas in the borough.

- 3.3.26 The sustainable website campaign www.itsuptoalofus.co.uk campaign will continue to be used to encourage healthier travel through podcasts, videos and other multimedia elements. The website also includes promotion of other initiatives including Harrow Junior Bike Week, Harrow Junior Walk and ITSUPTOGROWNUPS. These all target preschoolers and new parents to use sustainable modes of transport. The campaign also produces a monthly newsletter (I Move London) which is distributed online to encourage active participation in local events.
- 3.3.27 As part of the school travel planning process, road safety workshops are offered to children in schools across the borough. The workshops deal with finding safe routes to school; local road crossing points; how to cross a road safely and road safety distractions while crossing the road such as mobile phones, Ipods and peer pressure from friends, driver distractions and in-car passenger safety issues.
- 3.3.28 The borough also offers first school children micro scooter safety training. This looks at how to keep their scooter safe, shows them how to be careful of cars pulling out of driveways, avoid pedestrians and holes in pavements and to be careful of junctions etc.
- 3.3.29 Workshops are offered to parents of young children encouraging them to involve their children in the road crossing process. This encourages safer crossing for children as they grow up and cross the road independently.
- 3.3.30 Road safety officers in the Council offer general road safety advice across the borough. This includes advice to parents on child car seats, seat belts and other in-car safety issues such as child distractions while driving. Courses are offered through anti-natal groups at children's centres throughout the borough.

Objective 4

Reduce CO₂ emissions in Harrow, increase environment sustainability, improve general health and deliver a better quality of life in the borough through the use of travel planning and appropriate traffic engineering measures including providing improved facilities for pedestrians and cyclists

- 3.3.31 The borough does not have the powers to improve air quality and reduce CO₂ emissions boroughwide. However, there are measures that the borough needs to take to attempt to improve air quality in Harrow which will necessarily focus on reducing emissions from road traffic.
- 3.3.32 The borough has developed and will continue to use two websites to increase awareness of air quality issues, traffic congestion and transport pollution. These are www.breatheinHarrow.co.uk and www.itsuptoalofus.co.uk. The uptake of electric vehicles and the promotion of new vehicle technology through blog discussions will be promoted through the website campaign www.itsuptoalofus.co.uk.
- 3.3.33 The Council intends to install fully accessible electric charging points across the borough supporting TfL's Plugged in Places initiative. Plugged in Places is a consortium comprised of EDF Energy, Enterprise rent-a-car, Europcar, Hertz, London boroughs, NCP, Nissan, Sainsbury's, Scottish & Southern Energy, Siemens, SMMT, Streetcar, Tesco, Transport for London and Zipcar to deliver a network of around 7,500 charging points around London by spring 2013.
- 3.3.34 The Council will be installing its first public electric charging point at Harrow Civic Centre visitor's car park in 2011. This will be fully accessible for all users. The Civic Centre electric

- car parking will be launched alongside Source London which will deliver 1,300 public charging points across London by 2013. Harrow is a member of Source London which is a key plank in the Mayor's aspiration for London to be the electric capital of Europe and will be instrumental in encouraging the uptake of the first 100,000 Electric Vehicles in London.
- 3.3.35** Following evaluation of use of electric car parking spaces across London, Harrow will identify key locations for installing additional charging locations, ensuring that appropriately accessible locations are selected. The Council intends to work with developers to include charging points as part of their development travel plans and may in the future consider inclusion of charging points to be part of the planning condition. Promoting the benefits of electric vehicles will take place using www.ITSUPTOALLOFUS.co.uk and www.thegreeneffect.co.uk websites and through additional promotions assisted by Source London to local employers.
- 3.3.36** Car clubs will be encouraged through the use of travel plans. Harrow will also encourage and help facilitate car clubs at residential developments and work places and among social groups. Harrow is piloting the use of social media to do this.
- 3.3.37** Charging points will be encouraged for inclusion in residential developments via travel plans as part of the planning process. Residential and workplaces will be strongly encouraged to increase facilities for cyclists and cleaner fuelled vehicles in the pre-application stages through travel plans.
- 3.3.38** The extension of CPZs in the borough, which are primarily introduced to address parking stress in busy locations, also act as an incentive to buy "greener" cars. Parking permits are free for cars which meet the required environmental specifications. Because CPZ regulations design parking restrictions to meet the needs of local residents and businesses, less time is spent by both residents and visitors to the area driving around searching for a parking space. This reduces CO₂ emissions into the local environment. Harrow has a three year programme for introducing new CPZs and reviewing existing CPZs. This is considered by Harrow's Traffic and Road Safety Advisory Panel and revised on an annual basis. Burnt Oak, Canons Park station area, Pinner, Harrow/Harrow View, Harrow Weald, Kenton station area and North Harrow are all scheduled to be considered for either a new CPZ or for a revision of the existing CPZ by 2013/14.
- 3.3.39** The Lorry Control Scheme takes the form of controls on the movement of any heavy goods vehicles over 18 tonnes maximum gross weight at night and at weekends. It is more usually known as the London Lorry Ban. Restrictions are in place on the use of heavy goods vehicles to help minimise noise pollution in residential areas during unsocial hours through restricted use of certain roads. The scheme is managed through permitting issued by London Councils and supported by the Council.
- 3.3.40** Harrow leads on the steering group for the Association for Commuter Transport (ACT). This involves leading workshops for businesses and other boroughs on how best to promote sustainable transport and utilise new media creating trends rather than following them. This has furthered Harrow's work with the NHS, the private sector and promoted Harrow Council to businesses.
- 3.3.41** Harrow will continue to work with other West London boroughs on calibrating the Transport and Enhanced Emissions Model (TEEM). Once developed, the borough envisages using this as part of scheme development and planning ensuring that emissions become a consideration during the planning stage.
- 3.3.42** Trees release oxygen for us to breathe; absorb carbon dioxide (thereby reducing the greenhouse effect); filter air and absorb other pollutants such as ozone, nitrogen oxides and

sulphur dioxides, carbon monoxide, smoke, dust, ash and noise; provide varied habitats for wildlife; reduce noise levels and reduce everyday stress, particularly important in today's environment. Additional tree planting will be considered in all major schemes implemented and also in all neighbourhood schemes.

- 3.3.43** The Council is committed to promoting good standards of tree care and woodland management and is committed to replacing trees which have been removed and planting new trees to ensure Harrow remains green. The removal of trees is resisted unless there are sound arboricultural or other reasons to indicate otherwise. Removal of trees to allow the installation of a drop kerb to allow access to resident's front drive is not routinely allowed. The Council also seeks the replacement of all protected trees that are felled.
- 3.3.44** Good design principles can also help mitigate CO₂ emissions. Good design can reduce stop start driving and reduce congestion thereby mitigating some of the emissions. Appropriate distance spacing for road humps can also help to achieve this.

Objective 5

Support the borough's economic growth by regenerating Harrow Town Centre and the new Area of Intensification and ensure that the transport delivery needs of the Area of Intensification are prioritised

- 3.3.45** Bus routing through the town centre was complex and confusing as buses did not operate two-way on some of the key roads, such as Station Road (south), Greenhill Way and Sheepcote Road. This led to a less accessible public transport system for users which in turn reduced the attractiveness of Harrow as a shopping centre and hindered the economic viability of the town centre. Work started on introducing two-way buses to Station Road in 2010/11.
- 3.3.46** The completion of introducing two-way buses on Station Road will simplify the bus network and facilitate two way buses on all the town centre bus corridors. Further improvements in the town centre were planned but have been delayed because of the economic slow down and the associated lack of Section 106 funding. This project will make the town centre more accessible by public transport, simplify the bus network and enhance the shopping environment on Station Road. The new bus stops on the east side of Station Road together with the other public realm improvements will help to regenerate increased levels of economic activity in the locality and thereby help to improve the area.
- 3.3.47** Planting trees contributes to the urban townscape by improving people's quality of life and sense of wellbeing. In particular, they create aesthetic value improving the appearance of our environment, giving variety of scale, form, colour and shape; provide shelter and comfort; reduce noise levels; reduce everyday stress, particularly important in today's environment; provide shade from the sun and make areas more attractive to live and work; Tree planting will continue to be a fundamental part of all regeneration in Harrow and positively help to attract investment and create a sense of place and community pride.
- 3.3.48** Planning will start on a new major scheme on Station Road as the gateway to the town centre for introduction in 2014. Station Road is part of the Strategic Road Network and is a central spine in the Intensification Area. Work is needed to improve town centre connectivity, reduce congestion and create opportunities for regeneration between the two town centres where the area lacks a clear identity. This will obviously be subject to available Section 106 funding being made available.

Objective 6

Reduce the number of motorcycle casualties across the borough

- 3.3.49** The borough will be running a joint venture with the local police and 'Bike Safe' regarding motorcycle safety. This will include a street side advertising campaign and poster distribution to all sixth forms and colleges. Leaflets and posters will also be sent out to all motorbike dealers in the Borough. Road Safety staff will be working with the police to stop motorcycle drivers and encourage them to participate in a Bike Safe Training Course run by the Police. Checks will take place at locations where motorcycle accidents have been most prevalent and will predominantly focus on inexperienced young drivers as these are at most risk from accidents.
- 3.3.50** An annual review on the causation factor of all motorcycle accidents in the borough will take place. This will enable the borough to target specific areas for promotions and for traffic management measures should they be required. The borough is also considering doing a video campaign to promote motorcycle safety. This would be shown at public events borough wide and also at colleges in the borough.
- 3.3.51** Locations where motorcycle accidents have taken place will also be addressed as a priority in developing future neighbourhoods and corridors.

Objective 7

Improve social inclusion in the borough by improving the quality, capacity and accessibility of Harrow-on-the-Hill station and Harrow bus Station and improving the accessibility, efficiency and attractiveness of all transport including public transport borough wide and in particular Transport for London stations

- 3.3.52** Harrow will continue to lobby TfL to include Harrow-on-the-Hill station accessibility to their forward programme of station accessibility improvements. This will be done through a variety of methods including in response to relevant consultations and at regular traffic liaison meetings with TfL representation.
- 3.3.53** During the lifetime of this LIP, improvements will be made to the Harrow town centre bus station. Measures will include increased capacity, additional bus standing space and an improved interchange between bus station and rail services. Some of the required money has already been secured for this from Section 106 funds and additional funding is under negotiation. In addition, Harrow Capital and other TfL contributions will be made available for these measures.
- 3.3.54** An improvement to the area around Rayners Lane station is planned. This will improve accessibility to the station for pedestrians, cyclists and other road users. The scheme will involve providing parking lay-bys, speed tables, upgrading the footway, lighting and signage improvements and additional cycle parking facilities around the station area. There will also be an improved footway to the new development on Stonebridge Close. The pedestrian crossing facilities on Rayners Lane and Alexandra Avenue will be widened and lighting will be added.
- 3.3.55** The borough will continue to roll out bus stop accessibility improvements across the borough. This will increase the number of bus stops in the borough which are DDA compliant. Work will be prioritised along corridors where other traffic management work is taking place.
- 3.3.56** The borough will also promote the positive qualities of using public transport to commuters and residents via Harrow's sustainable transport campaign, safer travel at night campaign and tying in with other London wide initiatives such as Black History month.

- 3.3.57** The Council is in the process of establishing a Travel Assessment Service for Special Needs Transport for both children and adults. A formal travel training capability will be provided as part of this and the subsequent delivery of training to all clients who are assessed as having the potential to travel independently and who wish to be trained will be included. The Independent Travel Training service will be available from the beginning of 2011, and will have trained 40+ service users by the middle of 2012.
- 3.3.58** The Council will be establishing a pedestrian safety and confidence course for children with learning difficulties who are often trapped by their lack of confidence in travelling independently. The Council intends to offer training to volunteers who will then run roadside training for children with learning difficulties. These courses are aimed at building confidence and developing road safety skills in 14 to 18 year olds and aim to give the children the confidence needed to travel independently. The courses look at junctions, parked cars and road crossings. Obtaining these skills will enable the children to proceed to using public transport at a later stage.

Objective 8

Support projected population growth within the new Intensification Area by improving transport connectivity between Harrow-on-the-Hill station/Harrow bus station and Harrow & Wealdstone station

- 3.3.59** Increased transport connectivity in this area will be developed as the area population and business sector grows and as part of the masterplanning exercise to develop an Area Action Plan for the Harrow & Wealdstone Intensification Area. Some of this will be done through the new major scheme planned for Station Road in 2014. Details of this scheme are not yet developed, however it will include increased provision of cycle facilities and an improved walking environment.
- 3.3.60** Subject to funding, walking improvements to the area will be enhanced in 2013/14 through introducing Legible London. Legible London is a new pedestrian wayfinding system that helps people walk around an area. It provides clear and intuitive mapping and provides maps that show:
- Details of landmarks passed on journeys; and
 - Estimates the time it takes to reach destinations
- 3.3.61** The Legible London system uses a range of information, including street signs and printed maps to help people find their way. It is also integrated with other transport modes so when people are leaving the Underground, for example, they can quickly identify the route to their destination.
- 3.3.62** New real time information for buses for this area will be introduced from 2011-2012. As a result of advances in technology, a more complete information service showing bus arrival predications for bus stops will be provided through a variety of channels including mobile phone text messages, fixed and mobile web and a new generation of bus shelter mounted signs. The new Internet and text messaging services will secure access to bus real time information for passengers both at and away from a bus stop. This will enhance the attractiveness of using bus services in the vicinity.

Objective 9

Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change

- 3.3.63** The borough has commissioned a cycle network audit of the whole borough. Based on the audit, maps will be produced to show the public the cycling ability level required for all links and all parks in the borough. This should help the borough better engage with existing cyclists and also potential cyclists. Cycling leaflets will be produced based on these maps and customised maps made available to residents, new cyclists and other communities regarding the local cycle routes skills levels. Over the coming years, these maps will be integrated into the school travel planning process.
- 3.3.64** Gaps in cycle parking facilities will be identified as part of the cycle network audit and a programme for implementation of required cycle parking developed. The borough will continue to liaise with TfL and Network Rail regarding suitable, secure and increased cycle parking at Harrow on the Hill and Harrow and Wealdstone stations as well as the provision of locker facilities for cyclists at these stations.
- 3.3.65** The cycle network audit has also identified barriers to cycling in areas across the borough. These barriers will be used to develop neighbourhood and corridor programme details. In addition, where possible a mandatory cycle lane will be trialled.
- 3.3.66** Cycling in parks in Harrow is currently not allowed by local By-law. However, the borough is considering trialling permission to cycle in selected parks. This will need to be evaluated before the major change to the By-law is made.
- 3.3.67** The borough is encouraging cycling from an early age through Harrow's Junior Bike Week. The borough promotes cycling to pre school children at playgroups through fun Trike Rides. This also introduces new parents to sustainable transport and cycling as a way of commuting and has had a positive impact on adult cycle training.
- 3.3.68** The borough will continue to use the sustainable website campaign www.itsuptoallofus.co.uk to encourage cyclists to engage on cycle parking in the borough, promoting cycling to new cyclists and promoting cycle training and other Harrow cycling events. It will also highlight the important health benefits associated cycling and tie up with the borough's Active Travel promotions. Harrow will continue to engage with commuters and encourage cycle journeys via social media and Harrow's Twitter feed. This entails targeting, drivers stuck in traffic, commuters waiting for trains and those seeking faster journeys to reach their destinations.
- 3.3.69** To increase the attractiveness of cycling the borough encourages new cyclists and offers personal route mapping facilities via a series of events and promotions tied in with National Bike Week – roaming bike buddy, beat the bus and Back on your Bike.
- 3.3.70** The borough offers free cycle training using external trainers to all those that live or work within the borough. This is offered to both children and adults. The courses are for total beginners up to an advanced level and offer skills and training specific to the needs of the individual and include all aspects of cycling safely. The advance courses offer training to ensure riders can cycle on fairly busy roads and know how to deal with complex junctions and roundabouts. Maps are provided to individuals at the cycle training to help map out the routes they are most likely to use to further improve their cycling confidence. The courses are also used to promote recreational cycling.
- 3.3.71** Cycle promotion events encouraging people to get on their bikes take place at various times of the year in Harrow. These events enable potential cyclists to try out different types of bicycles and to consider bike maintenance issues. The event also promotes cycle training to the wider community.

- 3.3.72** The borough has produced and will be promoting a series of cycle training videos to go live on Harrow's ITSUPTOALLOFUS YouTube channel. These will advise users on various cycle skills such as how to pick a bike, how to fit a helmet, safer cycling, how to repair a puncture etc. The Council will also extend the I Move London monthly newsletters to include a cycling-specific newsletter.
- 3.3.73** As cycling increases in the borough, the Council will need to improve liaison with local cyclists. Improved communication will help identify issues early and help the Council address any outstanding issues. This communication will be increased over the coming years.
- 3.3.74** Cycling issues including cycle parking will be addressed in all corridors identified for work in the Programme of Investment.

Objective 10

Support Harrow's local economy by reducing congestion, improving the efficiency of servicing and delivery and making essential car journeys easier

- 3.3.75** The way Harrow addresses congestion issues are outlined in Harrow's Network Management Plan.

HARROW'S NETWORK MANAGEMENT PLAN

The Traffic Management Act 2004 introduced a new network management duty for local traffic authorities. Such authorities are required to manage their road network in order to achieve two main objectives, which are:

- (a) to secure the expeditious movement of traffic on that network, and
- (b) to facilitate the expeditious movement of traffic on road networks for which another authority is the traffic authority.

Both the organisational structure and service delivery in Harrow have changed in direct response to the Act. The changes have impacted on the way the Council works to deliver services and changed the focus of different service areas.

Organisationally, a Traffic Manager was appointed in 2006 and a Highway Network Management Team set up to act as the hub for improved management and co-ordination of activities on and affecting the highway network within the borough boundary.

Road congestion is caused where the volume of traffic exceeds available capacity. This can be as a result of:

- High traffic volumes
- Unplanned events such as emergency works, accidents, traffic signal malfunctions, adverse weather conditions
- Planned events such as rubbish collections, recycling, tree pruning, abnormal load movement, utility works and road schemes etc.

There is an array of organisations that now need to consider the Traffic Management Act but the Council is required to take a strategic lead. In particular, the emergency services, TfL, local transport operators, utility companies, freight services, developers and the travelling public are all impacted by the changes that have been introduced and all need to work together to ensure that the benefits are maximised.

The issue of **high traffic volume** is addressed in a variety ways:

- i) Restraining parking (particularly all day commuter parking)
- ii) Improving the alternatives to the car – improving facilities for public transport (especially buses), walking and cycling, such that people have a greater choice and reliance on the car is reduced.
- iii) Raising awareness of travel choices and that continued reliance on the car is not sustainable - and promoting alternatives to the car. The Council employs a Sustainable Transport Officer who undertakes many promotions, mostly funded by Transport for London.
- iv) Ensuring new developments comply with sustainable principles – this includes restraining car

use and including facilities to promote use of sustainable modes of transport. Strategies to deal with **unplanned events** and incidents are the responsibility of the Emergency Planning Officer together with the Traffic Manager and emergency services.

All other **planned events**, activities and works that affect the highway network are co-ordinated by the Highway Network Management Team. Major impact works are discussed with emergency services and local transport operators to agree best practice methods for traffic management and timings. When required, advanced warning signs are also placed on site prior to commencement of works to inform the travelling public of the impending disruption.

All works and registerable activities are recorded on the Councils street work register and copied to the TfL 'LondonWorks' central register system which acts as a public information service for the borough and London as a whole. This text and map based system is used to look for possible conflicts when co-ordinating activities and is also used to improve cross borough co-ordination.

The Highway Network Management Team also provides a weekly update of all ongoing and planned significant impact works which is distributed across a wide audience who are impacted by these works. A copy of this update is also sent to adjoining authorities to assist in their co-ordination duty.

The Council provides a link via its own website to the TfL 'LondonWorks' website to give interested parties an accurate and up to date view of current and impending works.

Participation in TfL's Traffic Management Forum ensures that the borough takes on best practice and complies with the Network Management Duty.

- 3.3.76** In addition to this, specific schemes are designed and implemented which help reduce congestion.
- 3.3.77** Along the Church Road and Broadway corridor through Stanmore, linking of the four sets of traffic signals will be investigated. Linking these signals will ease congestion and may provide an opportunity to provide a pedestrian crossing phase at the junction of Stanmore Hill and The Broadway
- 3.3.78** Eastcote Lane/ Rayners Lane junction and outside Kenton library are two areas on the network where the road layout needs to be reviewed with the intention of reconfiguring in order to smooth traffic flow and reduce congestion. These have been identified by local councillors and residents, bus companies and the emergency services as areas of concern where improvements to the road layout will provide improved capacity. Works are likely to include road widening and relining the road carriageway and / or introducing mini roundabouts. It is unlikely that this work can be done during the lifetime of this LIP2.
- 3.3.79** At the junction of Kymberley Rd/College Rd the removal of the traffic signals will be considered. This will be part of a scheme to increase capacity at Harrow bus station, create bus standing space on Kymberley Rd and review the operation of the junction and will be supported by Section 106 funds.
- 3.3.80** Localised studies will continue to be done to consider freight delivery issues and to see if there are opportunities to park delivery vehicles off the main routes. Providing suitable parking for delivery vehicles, reduces the amount of time vehicles spend in traffic looking for parking places and therefore reduces congestion.
- 3.3.81** Illegal, dangerous and obstructive parking can all cause congestion. CCTV monitoring at key junctions helps the borough know when congestion is a result of parking problems and this can then be addressed through improved civil enforcement measures.
- 3.3.82** Following a trial, it is hoped that electronic timed bus lane signs will be introduced across Harrow's bus lanes. These signs are timed and change the message visible to drivers dependent on whether or not the bus lane is operational. This will enable drivers to be

clearer about when they can legitimately drive in the bus lane without facing a penalty charge. This should then reduce local congestion.

3.3.83 Harrow will continue to work with TfL to review signal timings required to optimise signals. Signals are regularly reviewed through quarterly joint signal meetings. A key requirement for optimising signal is the impact on congestion.

3.3.84 Car sharing and the use of Car Clubs will be actively promoted through the ITSUPTOALLOFUS campaign. This is intended to reduce use of single occupancy vehicles and therefore have a reduce congestion.

SMOOTHING TRAFFIC FLOW

In designing all corridor and neighbourhood proposals Harrow will work with TfL's Directorate of Traffic Operations (**DTO**) on their ongoing review of signal timings to improve the efficient operation of the network. We will also work with TfL DTO and local stakeholders regarding the potential for trialling the removal of traffic signals in situations where it may deliver smoother traffic flows, without increasing any risk to the safety of pedestrians.

When speed reduction measures are introduced, we will ensure that traffic calming measures are spaced consistently and at appropriate distances. This deters drivers from driving in a stop start way and thereby makes the journey smoother.

Objective 11

Improve the quality of life of residents and visitors and improve overall health the borough will improve pedestrian walkways that use and link existing parks and open spaces with town centres and public transport provision

3.3.85 Harrow intends to use the green grid links identified in the borough to find the safest and most scenic routes to link areas together and thereby encourage new walkways. Where possible, improvements to identified links will be included in the corridors and neighbourhoods programmes. Planting additional trees and improving signage will help to improve pedestrian walkways.

3.3.86 Work identified from the green grid that will help achieve this objective involves the following:

- Linking the Celandine route to Pinner Memorial Park and Pinner Village. This will most likely take place in 2011/12 and will mainly involve footpath improvement work, new tree planting and directional signage.
- Link Harrow Recreation Ground with Kenton Recreation Ground and Harrow town centre. This will mainly involve new and upgraded signage, decluttering of signage and street tree planting along Elmgrove Road, Hindes Road, Bonnersfield Lane Gayton Road, Northwick Park Road, Station Road and a small length of Pinner Road.
- Link Chandos Recreation ground to Edgware Rd by improving the footpath besides Edgware Brook.
- Link Roxbourne Park Recreation Ground to Yeading Walk

3.3.87 In addition to these, as part of the Mollison Way major scheme, the borough intends to upgrade the Camrose Avenue pedestrian crossing which will improve access to Chandos Recreation Ground from Stag Lane and Canons High schools as well as access to Mollison Way shops.

Objective 12

Ensure that the vitality of the town centre is supported through good transport access via all modes of transport prioritising sustainable modes of transport

- 3.3.88** Accessibility improvements at Harrow on the Hill station would be a major benefit to the town centre. Harrow does not have the funds to make these changes and neither will Section 106 funding be sufficient to do this. Therefore Harrow will continue to lobby TfL to reinclude this work in their station accessibility improvement programme.
- 3.3.89** The completion of introducing two-way buses on Station Road will simplify the bus network and facilitate two way buses on all town centre roads. This will increase the attractiveness of Harrow as a shopping centre and thereby increase the vitality of the town centre. The Station Road project will also improve cycling access to part of the town centre through some improved route junction facilities and increased provision of cycle parking.
- 3.3.90** Directional car signage for town centres in the borough is quite poor. Harrow intends to review and improve all town centre signage for the borough. This will most likely be done over several years and will be funded by a variety of sources including Section 106 funding, Harrow capital/revenue funds and TfL funding. This should help raise the profile of the town centres to a wider audience.
- 3.3.91** Subject to funding, walking improvements to town centres will be enhanced in 2013/14 through introducing Legible London. This will help the public locate key shops, services and other destinations in Harrow and Wealdstone and thereby improve the walking environment.
- 3.3.92** Planting trees contributes to the landscape in their own right in an urban setting in contributing to people's quality of life and sense of wellbeing. In particular, they make areas more attractive to live and work; positively affect property values and also help to attract investment; create a sense of place and community pride. Tree planting will take place in all new major schemes and in some corridor and neighbourhood works. It will be considered as a way for improving town centre vitality through improving the walking environment.

3.4 Link between Harrow's objective and interventions

- 3.4.1** Table 3-1 below, summarises the types of interventions that Harrow will be introducing to meet all of our objectives as well as the anticipated end date for implementation.

Table 3-1: Link between interventions and objectives and anticipated end date

	Harrow objectives	Types of interventions (anticipated end date)
1.	Provide access to employment opportunities within and beyond the borough and also support improved access to a wide range of facilities such as retail centres and education and health services as well as access to cultural heritage and outdoor green spaces	Belmont trail improvements (2011/12 and then 2013/14) Green grid improvements to cycle links* Mollison Way scheme (2011/120 Direct link to Gatwick airport** Additional cycle links with cycle parking*
2.	Support proposals for improved orbital transport links across the Borough and between outer London	Feasibility study for route 186 (2012/13) Enhanced bus priority work at traffic signals

* Ongoing

‡ Limited borough influence

	Harrow objectives	Types of interventions (anticipated end date)
	centres to support a wider catchment area	possibly on route 140 (2013/14) Additional cycle links*
3.	Promote healthy and safe travel particularly for pedestrians and cyclists	Traffic calming in local areas* Promote guided walks and also promote Harrow Weald nature trail* Improve walking amenities in Harrow's green belt* Additional school cycle parking and parent walking shelters* More 20mph zones around schools* School road safety workshops* School micro scooter safety training*
4.	Reduce CO ₂ emissions in Harrow, increase environmental sustainability, improve air quality and deliver a better quality of life through the use of travel planning and appropriate traffic engineering including providing improved facilities for pedestrians and cyclists	Installation of electric charging points* Car club promotions* Additional controlled parking zones* Additional tree planting as part of all schemes but particularly as part of major schemes* Cycle lanes* Bus priority works*
5.	Regenerate Harrow Town Centre and new Area of Intensification and ensure that the transport delivery needs of the Area of Intensification are prioritised	New major scheme on Station Road at the gateway to the town centre (2014)
6.	Reduce the number of motorcycle casualties across the borough	Bike Safe joint venture with local police (2012/13) Safety improvement works prioritised in locations of worst motorcycle accidents (2012/13) Road maintenance*
7.	Improve the quality, capacity and accessibility of Harrow-on-the-Hill station and Harrow bus Station and improve the accessibility, efficiency and attractiveness of all transport including public transport borough wide and in particular Transport for London stations	Disabled parking spaces and dropped kerbs programme* Harrow on the Hill station access improvements* Harrow bus station enhancements (2013/14) Station access improvements around Rayners Lane (2011/12) Bus stop accessibility improvements* Travel training* Bus priority works*
8.	Improve transport connectivity between Harrow-on-the-Hill station/Harrow bus station and Harrow & Wealdstone station	Harrow and Wealdstone Intensification Area action plan (2031) Legible London (2013/14) Real time bus information for this location (2012/13) Bus priority works*
9.	Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change	Cycle links and cycle parking improvements* Cycle maps* Cycling leaflets* Cycle training – adults and children* Cycling promotion events* School travel maps* Road maintenance*
10	Improve the efficiency of servicing and delivery, reduce congestion and make essential car journeys	Linking signals at junction of Stanmore Hill and The Broadway (2012/13)

‡ Limited borough influence

* Ongoing

	Harrow objectives	Types of interventions (anticipated end date)
	easier	Possible removal of traffic signals at junction of Kymberley Rd/College Rd (2013/14) Freight delivery studies (2013/14) Electronic bus lane signs (2011/12) Bus priority works*
11	Improve pedestrian walkways that use and link existing parks and open spaces with town centres and public transport provision	Additional pedestrian links upgraded with new trees* Mollison Way scheme (2011/12) Northumberland Road scheme (2013/14) Sustrans greenway route (2013/14) Road maintenance works*
12	Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport	Harrow on the Hill station access improvements* Increased cycle parking in town centres* Additional cycle lanes* Bus priority works* Directional car signage to town centre (2020) Additional tree planting*

3.5 Delivering the Mayor's high profile outputs

3.5.1 The Mayor requires boroughs to work towards achieving a number of high profile specific outputs. These relate to cycle parking, cycle superhighways, electric vehicle charging points, better streets, cleaner local authority fleets and street trees.

3.5.2 The table below shows how each of these outputs will be supported:

Output	Supported actions
Cycle parking	<p>Additional spaces will be considered when implementing all corridor schemes. Additional funding will be provided to schools as part of their travel plan updates to provide more spaces.</p> <p>Around 50 cycle parking spaces will be provided per year to schools in the borough at their school sites. In general these will be novelty designed carbon neutral cycle pods. It is also planned to deliver around 25 on-street spaces per annum across the borough. These will be conventional Sheffield hoops. In high use areas and those with security issues, it is intended to install around 10 off-street cycle parking spaces per year.</p> <p>Additional to this will be off-street cycle parking provided as part of Section 106 agreements. Based on previous years, this is likely to be around an additional 50 off-street cycle parking spaces.</p>
Cycle superhighways	The borough will support these through promoting these to local businesses, improving access to the superhighways and supporting locations for future cycle hire schemes within the borough.
Electric vehicle charging points	Providing space in Civic Centre car park and identifying future spaces. Support and promote the provision of charging points to

* Limited borough influence

Output	Supported actions
	local businesses and residential developments.
Better streets	In all neighbourhoods, corridors and major schemes the borough will consider the Better Streets principals and in particular the need to reduce clutter, improve traffic management, increase the permeability of streets, creating spaces that make it easier for cyclists, pedestrians and disabled people to get about.
Cleaner Local Authority Fleet	The Council corporate target is to make an annual saving of 4.0% on our carbon footprint. Although most of this will be done by targeting buildings that have high energy footprints and low thermal efficiency, transport is still part of this equation. Reduction of CO ₂ from the Council's fleet is a council corporate target. Fleet vehicles which have not yet been ordered will be required to demonstrate in the procurement process the measures that will reduce CO ₂ emissions. The waste management fleet was renewed in 2008/9. Euro V diesel engines were specified. Similarly emissions of NO _x will also be reduced when purchasing new council vehicles.
Trees	It is a borough objective to increase the amount and variety of trees and plants across the Borough's open spaces and within streetscapes. Street trees will be included as part of all public realm improvements and also through all corridor, neighbourhood and major schemes implementation.

See also Section 4.3 Output reporting on page 103.

3.6 Programme of Investment

- 3.6.1** The specific interventions set out in this Delivery Plan will be delivered by April 2014. The details in the plan will also be revised at least every three years.
- 3.6.2** Table 3-2 shows Harrow's planned investment in transport between 2011/12 and 2013/14. This is based on the assumption that the borough will continue to receive the following TfL formula funding for future years:

2011/12	£1.749 million
2012/13	£1.678 million (indicative funding)
2013/14	£1.438 million (indicative funding)

Developing the programme of investment

- 3.6.3** In order to develop the programme Harrow has done the following:

- 3.6.4** Considered the following evidence:

- IMD data
- TfL congestion data
- Police accident data
- Locations of bus stops requiring accessibility improvements
- Future bus priority issues that need addressing
- Borough Green grid actions required
- Rights of Way Improvement Plan Statement of Action

- 3.6.5** Also considered a multitude of other issues that have arisen from written and spoken requests to borough officers, input from Councillors, public petitions, the LDF consultation and local knowledge of many officers.
- 3.6.6** In putting together the details of the programme the draft transport objectives were fully considered as was the Mayor's high profile outputs and the need to achieve the targets identified in Section 4 - Performance Monitoring Plan.

Table 3-2: Harrow Planned Programme of Investment

Programme areas	Funding source	Funding (£000)				MTS goals					
		2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
Corridors and Neighbourhoods	Streatfield Road / Christchurch Ave Traffic calming /review £60 + 45k cycle improvements - address KSI clusters around junctions and review heavy use by HGVs using this route	LIP allocation	105	0	0	105	✓	✓	✓	✓	✓
	Harrow Town Centre traffic calming KSIs - specifically targeting pedestrian KSIs and motorcycle casualties	LIP allocation	50	0	0	50	✓	✓	✓	✓	✓
	Warren Lane (BAE Site) Junction improvements/ access issues /lighting/footpath	Developer	100	0	0	100	✓	✓	✓	✓	✓
	Wood Lane Parking controls /warning signing	Developer	15	0	0	15	✓	✓	✓	✓	✓
	Stanmore Hill /Uxbridge Road signal work /congestion relief - improve bus accessibility by linking 4 sets of signals - possibly introduce ped phase at the Stanmore Hill/The Broadway junction	LIP allocation	150	30	0	180	✓	✓	✓	✓	✓
	Honeypot Lane / Whitchurch Lane KSIs - address high number of KSIs along corridor	LIP allocation	103	0	0	103	✓	✓	✓	✓	✓
	Shaftesbury Ave, Roxeth Hill, Sudbury Hill, Whitmore Road KSIs - particularly address KSI clusters around junctions	LIP allocation	70			70	✓	✓	✓	✓	✓
	Address key motorcycle and child ped accident locations	LIP allocation		100	100	200	✓	✓	✓	✓	✓
	Stanmore Hill bus stop accessibility - hard surfacing, signing and lining and kerb height adjustment as necessary	LIP allocation	25	0	0	25	✓	✓	✓	✓	✓
	Edgware Road bus stop accessibility - hard surfacing, signing and lining and kerb height adjustment as necessary	LIP allocation	30	0	0	30	✓	✓	✓	✓	✓
	Elm Pk Rd / Cannon Lane / Rayners Lane bus stop accessibility corridor - hard surfacing, signing and lining and kerb height adjustment as necessary	LIP allocation	30	0	0	30	✓	✓	✓	✓	✓
	Bus stop accessibility improvements	LIP allocation	0	50	50	100	✓	✓	✓	✓	✓
	Marsh Lane cycling improvements - minor improvements for cycles to cross Marsh Lane which acts as a barrier. These will enable improved bikeability levels	LIP allocation	50			50	✓	✓	✓	✓	✓

Programme areas	Funding source	Funding (£000)				MTS goals				
		2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change
Long Elmes / College Avenue / The Avenue cycling improvements - minor improvements for cycles to cross Long Elmes and High Road which act as barriers. These will enable improved bikeability levels	LIP allocation	50	0	0	50	✓	✓	✓	✓	✓
Common Road / Brookhill cycling improvements - minor improvements needed to enable improved bikeability levels along predominantly rural type roads.	LIP allocation	50	0	0	50	✓	✓	✓	✓	✓
Pinner Road bus priority - carriageway widening to incorporate full width left turn lane for all traffic including buses	LIP allocation	60	0	0	60	✓	✓	✓	✓	✓
Rayners Lane bus priority completion - completion of inset parking bays and cycle track relocation	LIP allocation	40	0	0	40	✓	✓	✓	✓	✓
Bus route joint inspection meetings and implementations	LIP allocation	0	100	150	250	✓	✓	✓	✓	✓
Electronic bus lane signs - introduce revolving signs to clarify bus lane operational hours	LIP allocation	10	0	0	10	✓	✓	✓	✓	✓
Locket Road parking review - Increase road width for turning buses	LIP allocation	5	2	0	7	✓	✓	✓	✓	✓
Clamp Hill / Uxbridge Road cycling corridor - Improved bikeability in a topographically difficult location	LIP allocation	0	166	90	256	✓	✓	✓	✓	✓
STUDY Pinner area cycle facilities and legal loading bays	LIP allocation	25	0	0	25	✓	✓	✓	✓	✓
STUDY Walking studies - identifying key pedestrian corridors for future work	LIP allocation	15	0	0	15	✓	✓	✓	✓	✓
Belmont trail - to maximise use of this important green corridor (former railway line) through the urban environment, ongoing improvements will be made including rubbish clearance, signage, ground levelling and planting	LIP allocation	33	60	0	93	✓	✓	✓	✓	✓
Disabled parking and dropped kerb programme - Additional requirements necessary to address an increasingly mobility impaired population	LIP allocation	35	65	65	165	✓	✓	✓	✓	✓
Cannon Lane schools 20mph zone - traffic calming on local roads to encourage walking and cycling	LIP allocation	50	0	0	50	✓	✓	✓	✓	✓
Priestmead schools 20mph zone - traffic calming on local roads to encourage walking and cycling	LIP allocation	60	0	0	60	✓	✓	✓	✓	✓

Programme areas	Funding source	Funding (£000)				MTS goals				
		2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change
Roxbourne schools 20mph zone - traffic calming on local roads to encourage walking and cycling	LIP allocation	0	40	0	40	✓	✓	✓	✓	✓
Elmgrove schools 20mph zone - traffic calming on local roads to encourage walking and cycling	LIP allocation	0	50	0	50	✓	✓	✓	✓	✓
Weald schools 20mph zone - traffic calming on local roads to encourage walking and cycling	LIP allocation	0	50	0	50	✓	✓	✓	✓	✓
Belmont schools 20mph zone - traffic calming on local roads to encourage walking and cycling	LIP allocation	0	0	50	50	✓	✓	✓	✓	✓
Additional linear greenways projects	LIP allocation			60	60	✓	✓	✓	✓	✓
Shopmobility - increased opening hours of service particularly at weekends and in Christmas sales	LIP allocation	5	5	5	15	✓	✓	✓	✓	✓
Legible london signing for Harrow town centre and Wealdstone	LIP allocation			100	100	✓	✓	✓	✓	✓
Environment inc charging points - Promotion and installation of charging points in Harrow - Air quality education through multi media resources	LIP allocation	40			40	✓	✓	✓	✓	✓
Future programme development - identify future work and support ongoing work and for traffic surveys	LIP allocation	40	50	50	140	✓	✓	✓	✓	✓
Bus Priority: South Harrow - Eastcote Lane - Waiting and loading restriction on one side to be extended to allow opposing buses to pass near Kings Road	LIP allocation		60	20	80	✓	✓	✓	✓	✓
Bus Priority: Stanmore - Common Rd/ High Rd junction - Feasibility study for bus priority schemes at junction. Implementation following year. Scheme funding delayed by TfL due to TfL Signals resource availability. New left turn lane to bypass queuing straight ahead traffic. Involves civils, major stats and lining. Reduce journey time savings on route 258.	LIP allocation		75	75	150	✓	✓	✓	✓	✓
Bus Priority: Stanmore - London Rd/Brockley Hill - Bus Priority measures at junction and along London Road	LIP allocation			10	10	✓	✓	✓	✓	✓
Eastcote Lane / Rayners Lane reconfigure junction Work needed to relieve congestion and smooth traffic flows and to address accidents at the junctions	LIP allocation		50		50	✓	✓	✓	✓	✓
Kymerley Rd/ College Rd review	LIP allocation			150	150	✓	✓	✓	✓	✓

Programme areas	Funding source	Funding (£000)				MTS goals					
		2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
Smarter travel	layout - Increase bus station capacity by creating standing space on Kymberley Rd	Developer		250	250						
	Station Road feasibility study - Review ped crossing, central islands and bus lane layout	LIP allocation		50	50	✓	✓	✓	✓	✓	
	Smoothing traffic issues General congestion relief	LIP allocation		50	50	✓	✓	✓		✓	
	Burnt Oak CPZ review of scheme including review of parking around new Krishna Avanti school	Harrow capital	30			30	✓	✓	✓	✓	✓
		Developer	40			40					
	Canons Park station area CPZ review	Harrow capital	70	30		100	✓	✓	✓	✓	✓
		Developer	40			40					
	Pinner CPZ review and extension	Harrow capital	60	40		100	✓	✓	✓	✓	✓
	Harrow CPZ review and potential expansion to Harrow View area	Harrow capital	50	20		70	✓	✓	✓	✓	✓
	Harrow Weald potential new CPZ area	Harrow capital	50	20		70	✓	✓	✓	✓	✓
	Kenton Station area CPZ review	Harrow capital		50	30	80	✓	✓	✓	✓	✓
		Developer			90	90	✓	✓	✓	✓	✓
	North Harrow CPZ	Harrow capital			30	30	✓	✓	✓	✓	✓
		Developer			30	30					
	Problem streets - Improvements to streets with limited accessibility for service and Emergency vehicles and where specialist access is required	Harrow capital	20	20	20	60	✓	✓	✓	✓	✓
	Freight issues investigation and implementation and signing strategy for London Lorry ban	LIP allocation		100	60	160	✓	✓	✓		✓
	Rights of Way legal issues and mapping Update definitive map as required	LIP allocation		10	15	25		✓	✓	✓	✓
	PETTS HILL payback	LIP allocation	333	333		666					
School support - Workshops on reviewing school travel plans, theatre in education events, Publicity and promotions including newsletters and web based information, small grant funding, walk to school events	LIP allocation	75	70	70	215		✓	✓	✓	✓	
Promoting sustainability - Promotion of active travel events tying up to Olympics - Ongoing promotions for sustainable travel (using social media)	LIP allocation	45	45	45	135	✓	✓			✓	
Road safety education - road safety promotional material, school presentation visits, theatre in education, other additional safety campaigns	LIP allocation	35	35	35	105		✓	✓	✓	✓	

Programme areas		Funding source	Funding (£000)				MTS goals				
			2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change
	Cycle training - Promote cycle training to adults and children both those who live or work in the borough, through the Council's website, travel plans and sustainable travel events. Adult training is offered as either individual or group sessions, tailored to the ability of the rider and loan cycles can be provided to complete novice riders when required.	LIP allocation	98	95	100	293	✓	✓	✓	✓	✓
	School travel plan advisor - financial support to maintain position	LIP allocation	22	22	22	66	✓	✓	✓	✓	✓
	Pedestrian / cycling safety promotions	LIP allocation	10	10	10	30	✓	✓	✓	✓	✓
	Travel training - provide support to those with learning difficulties to use public transport	LIP allocation		5	6	11	✓	✓	✓	✓	✓
Integrated transport total			2,224	1,858	1,858	5,940					
Local Transport Fund – projects to be agreed by Transport Portfolio Holder			100	100	100	300					
Maintenance	A4090 Alexandra Ave - West footway High Worples to 383 Alexandra Ave	LIP allocation	102			102	✓	✓	✓	✓	✓
	A 4005 LONDON RD / SUDBURY HILL - Roxeth Hill to 30m South Of South Hill Ave	LIP allocation	122			122	✓	✓	✓	✓	✓
	A 410 UXBRIDGE ROAD - Milne Field Roundabout to Anselm Rd (DUAL C/WAY)	LIP allocation	295			295	✓	✓	✓	✓	✓
	A 312 Northolt Rd - North - Templars Hse to Police Station	LIP allocation	53			53	✓	✓	✓	✓	✓
	A 409 High St - East footway -Locket Rd to No 96 & Spencer Rd To Claremont Rd	LIP allocation	52			52	✓	✓	✓	✓	✓
	Additional roads based on road condition surveys	LIP allocation		500	500	1,000	✓	✓	✓	✓	✓
	Bridge assessment and strengthening - Prioritised locations	Council revenue	90	90	90	270	✓	✓	✓	✓	✓
	TfL interim measures	25	25	25	75	✓	✓	✓	✓	✓	
Maintenance total			739	615	615	1,969					
Major Schemes	Mollison Way	LIP allocation	1,000			1,000	✓	✓	✓	✓	✓
	Rayners Lane	LIP allocation	150			150	✓	✓	✓	✓	✓
		Developer	25			25					
	Northumberland Road	LIP allocation		100	900	1,000	✓	✓	✓	✓	✓
		LIP allocation			100	100	✓	✓	✓	✓	✓
	Station Road Intensification Area	Developer				0					
SUSTRANS greenway route from Stanmore, through to Brent and then Ealing all the way to the Thames (funding is for all boroughs)	LIP allocation		200	1,000	1,200	✓	✓	✓	✓	✓	
Major Scheme total			1,175	300	2,000	3,475					

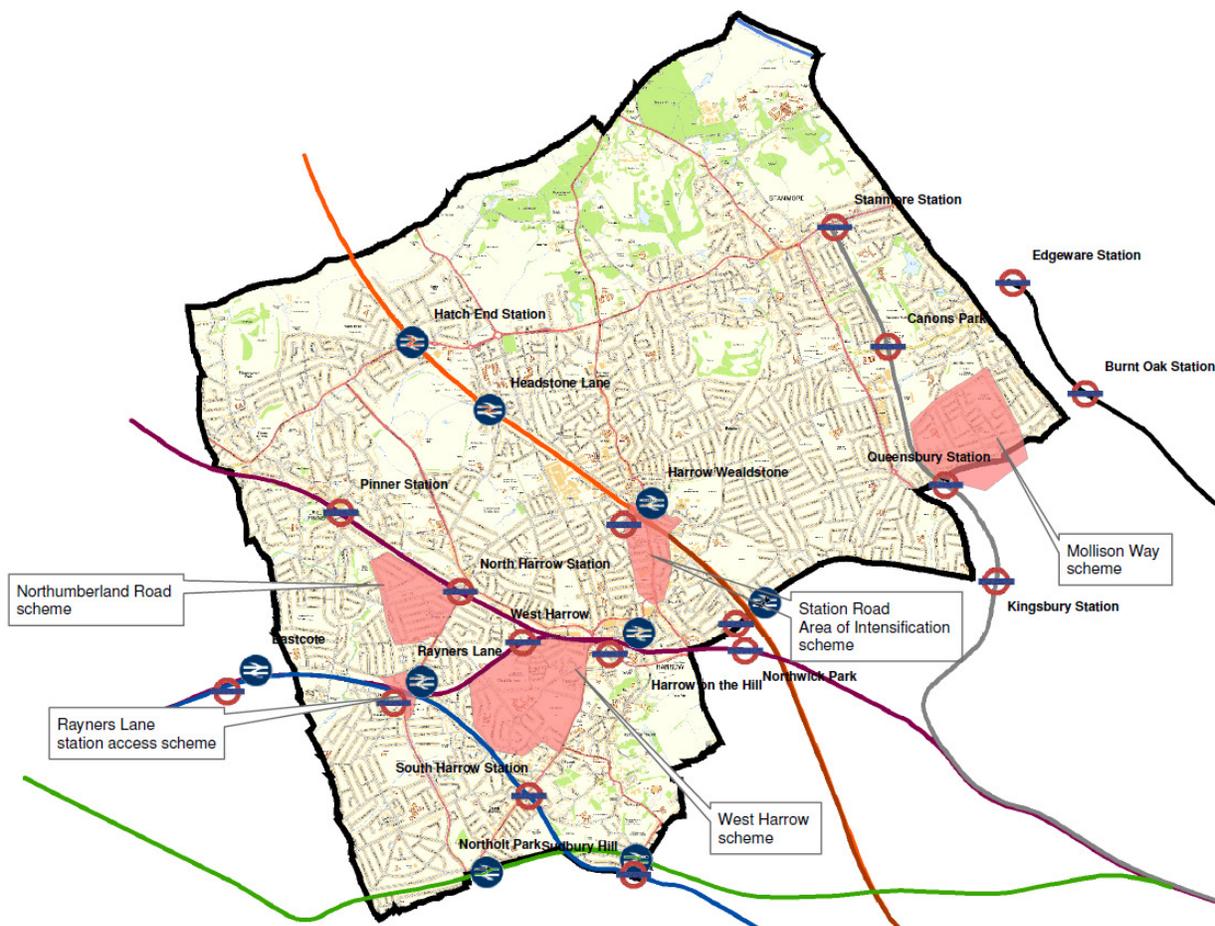
3.7 Major schemes

3.7.1 In considering future major schemes, a key consideration has been areas where greatest benefits could be realised.

3.7.2 Mollison Way streets for people scheme and Rayners Lane station access scheme are both major schemes currently being developed. Future major schemes currently under consideration include improvements on Station Road in the new Intensification Area, Northumberland Road corridor and West Harrow. The Intensification Area scheme will be primarily funded by Section 106 funding and supported TfL funding. Other schemes will all be primarily funded by TfL though other sources of funding, and in particular Section 106 funding, will be sought for contributing to the schemes. All these schemes will undergo a public consultation which will include key stakeholders before being introduced.

3.7.3 The locations of all of these schemes are shown on the following map.

Figure 3-1: Map of all planned major schemes



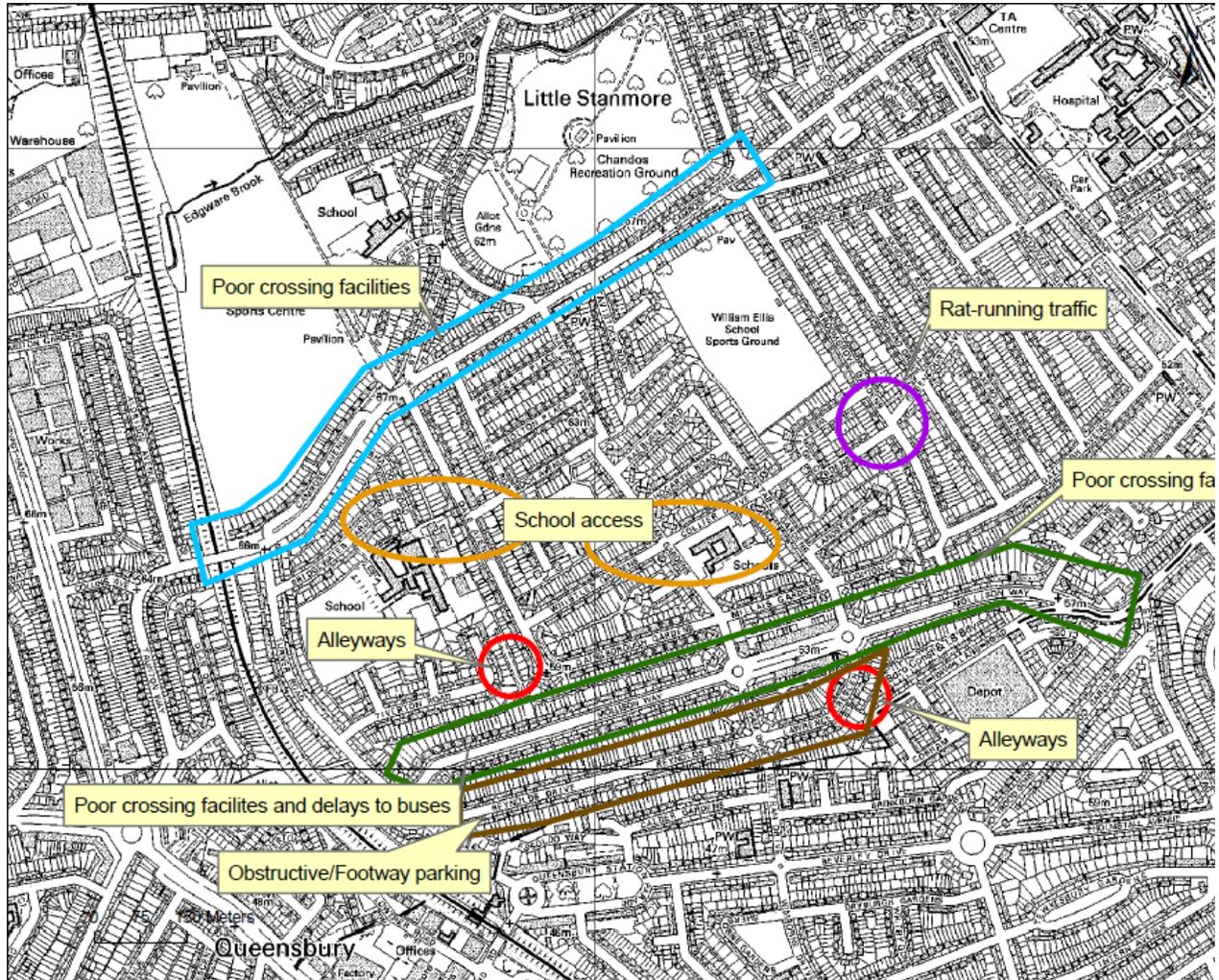
3.7.4 Mollison Way and Rayners Lane schemes are being designed in 2010/11 and are planned to be implemented in 2011/12. These schemes have received TfL approval and detailed designs are being developed for implementation in 2011/12.

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3.7.5 Northumberland Road, West Harrow and the Sustrans West London greenway route major schemes do not yet have TfL approval and a step 1 bid needs to be developed and agreed with TfL before the schemes can proceed.

3.7.6 It is hoped that the Northumberland Road scheme will be developed in 2012/13 and implemented the following year and that subject to Section 106 funding the Intensification Area scheme will be developed in 2013/14 and similarly implemented the following year and West Harrow the year after.

Figure 3-2: Details of Mollison Way issues



Rayners Lane Station Access

3.7.7 This scheme, initiated by the Council and supported by WestTrans, addresses accessibility issues on the approaches to the station. In particular, the scheme will improve pedestrian crossings, public transport interchange facilities, the public realm in the surrounding area and footways and provide raised tables and additional cycle facilities around the station.

- 3.7.8** This project will be mostly funded by TfL with contributions through S106 agreements. Public consultation on the scheme will be carried out after securing funding from Transport for London.

SUSTRANS West London greenway route (Stanmore to Thames Greenway)

- 3.7.9** Harrow intends to lead on a major scheme identified by SUSTRANS which will run from Stanmore, through to Brent and then Ealing all the way to the Thames. This runs along the Belmont Trail and will enable the trail to increase north south connectivity in the borough.
- 3.7.10** The entire route is poorly served by the National Cycle Network and similar high quality linear routes. Harrow intends to manage this work which crosses all three boroughs of Harrow, Brent and Ealing. Harrow plans to discuss this work with TfL in 2011/12 and hopes to start the design work for this in 2012/13 with a view to start implementation in 2013/14. The work planned is likely to take several years to complete.

Future major schemes

- 3.7.11** Station Road Intensification Area, Northumberland Road and West Harrow are three proposed future major schemes but they are as yet in the very early stages of consideration. Traffic issues in Northumberland Road and West Harrow areas have been of concern to both members of the public and Council members. The particular issues that need addressing are rat running, speeding traffic, inconsiderate parking, local area access, crossing points and local congestion. In Northumberland Road it is also intended to enhance the Yeading walk. In West Harrow it is intended to improve and enhance access to the recreation area.
- 3.7.12** The Area of Intensification has been selected as a holistic view of the area is needed. The area is an important gateway to both Harrow on the Hill and Wealdstone town centres. The route forms part of the strategic road network in Harrow and carries many key bus routes in the town centre. Work is needed in advance of planned growth in this area. The scheme is partially dependent on Section 106 funds being available.
- 3.7.13** The borough plans to submit details for Northumberland Road for consideration in 2011/12 and for Station Road Area of Intensification in 2012/13. Both these schemes are envisioned to cost around £1million each.
- 3.7.14** The contribution of the planned major schemes to Harrow's objectives is shown in the following table:

	Major scheme	Mollison Way	Rayners Lane	Northumberland Road	Station Road – Area of Intensification	West Harrow
	Harrow objectives					
1.	Ensure that the transport system provides access to employment opportunities within and beyond	✓	✓	✓	✓	✓

	Major scheme	Mollison Way	Rayners Lane	Northumberland Road	Station Road – Area of Intensification	West Harrow
	the borough and also supports improved access to a wide range of facilities, such as retail centres and education and health services as well as access to cultural heritage and outdoor green spaces					
2.	Support improved orbital transport links across the Borough and between outer London centres thereby providing greater access to a wider catchment area for employment opportunities by enabling journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment					
3.	Promote healthy and safe travel particularly for pedestrians and cyclists	✓	✓	✓	✓	✓
4.	Reduce CO ₂ emissions in Harrow, increase environmental sustainability, improve air quality and deliver a better quality of life through the use of travel planning and appropriate traffic engineering including providing improved facilities for pedestrians and cyclists	✓	✓	✓	✓	✓
5.	Regenerate Harrow Town Centre and new Area of Intensification and ensure that the transport delivery needs of the Area of Intensification are prioritised				✓	
6.	Reduce the number of motorcycle casualties across the borough				✓	
7.	Improve the quality, capacity and accessibility of Harrow-on-the-Hill station and Harrow bus Station and improve the accessibility, efficiency and attractiveness of all transport including public transport borough wide and in particular Transport for London stations	✓	✓	✓	✓	✓
8.	Improve transport connectivity between Harrow-on-the-Hill				✓	

	Major scheme	Mollison Way	Rayners Lane	Northumberland Road	Station Road – Area of Intensification	West Harrow
	station/Harrow bus station and Harrow & Wealdstone station					
9.	Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change	✓	✓	✓	✓	✓
10.	Improve the efficiency of servicing and delivery, reduce congestion and make essential car journeys easier	✓	✓	✓	✓	✓
11.	Improve pedestrian walkways that use and link existing parks and open spaces with town centres and public transport provision	✓		✓		✓
12.	Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport		✓		✓	

3.8 LIP2 Delivery risks

3.8.1 The following table sets out the primary risks, level and mitigating measures for the delivery of the LIP2 programme:

Table 3-3: Harrow LIP2 risk register

Risk	Level	Mitigating measures
<p><i>Reduction in TfL funding allocation</i></p> <p>None of the funding shown in this plan is guaranteed. Funds for work outlined in this plan is mainly from Transport for London through the LIPs needs based funding although some is through the Council capital/revenue grant. Both of these are potentially subject to large cuts. In addition, the poor state of the economy and a possible further recession will result in less funding available through any associated development Section 106 funding.</p>	Low	Will reprofile works to start at a later date

Risk	Level	Mitigating measures
<p><i>Reduced Harrow capital funding</i></p> <p>Harrow capital predominantly funds the controlled parking zone programme</p>	Medium	Will prioritise areas of greatest need
<p><i>Negative local consultation results</i></p>	Low	Will attempt to redesign works to fit local needs
<p><i>Utility works</i></p> <p>Unexpected and unplanned</p>	Low	This may change timetable of delivery but not more
<p><i>Environment</i></p> <p>Weather and environmental changes can impact on work delivery</p>	Low	Will reprofile works to work around the issue
<p><i>Lack of skilled staff</i></p>	Low	Harrow currently has a skilled team of in-house traffic engineers to design schemes. Should additional resources be required, Harrow will be entering into a new contract for works and professional services in 2013 and will address any skills gaps in negotiation with the new contractor.

4. Performance Monitoring Plan

Boroughs are required to set indicators and locally specific targets to be used to assess whether the LIP2 objectives are being met and whether the Mayor's goals and outputs are being realised. Mandatory indicators to be used are mode share, bus service reliability, asset condition, road traffic casualties and CO₂ emissions. The Mayor also requires boroughs to report on outputs relating to cycling, walking, road safety and personal security, buses, smarter travel, environment, local area accessibility, controlled parking and freight and cleaner local authority fleets.

4.1 Mandatory indicators

Boroughs are required to set locally specific targets for the mandatory indicators relating to the following:

- Mode share
- Bus service reliability
- Asset condition
- Road traffic casualties
- CO₂ emissions

This section will cover each of these indicators in more detail

4.1.1 Mode share

Definition

This indicator will measure the proportion of personal travel made by each mode by the borough of origin of the trip. This gives a broad indication of the general travel behaviour of households within a given borough.

If a trip is made by more than one mode then the main mode is the one which is used to cover the greatest distance.

This data will be reported as a three-year average, representing the three years up to the current one.

Key influences on this target in Harrow

Promotion of sustainable travel, school walking buses, school travel plans, cycle training, improvements and increased length to cycle paths, cycle parking facilities, cycle maps, increased bus frequencies, improvements to the walking environment and major schemes will all help increase the modal share of trips in the borough by sustainable forms of transport. In addition, if unemployment rises, as is expected in the near future, the cost of running a car will become less affordable and the popularity of cheaper transport options such as public transport, cycling and walking will increase.

Harrow has been very successful in implementing school travel plans. The national average of schools with approved travel plans is 91%, in London it is 92% and in Harrow it is 96%. There has also been a 6% reduction in car use for journeys to school in Harrow since 2007/8 (NI198).

Historically, improvements in the cycle infrastructure and the walking environment were made on a modal basis in the borough. The move in recent years to treating all areas holistically, will most benefit walking and cycling as all schemes will now consider these modes of transport. In particular, the uptake of cycle training in the borough has been consistently increased over recent years and therefore it is reasonable to expect this increase to be reflected in those cycling on all journeys.

In the longer term, the introduction of the intensification area and the work implementing major schemes will encourage modal shift in their vicinities.

Data

The latest data available for this is for the percentage of trips by main mode for the average day for 2006/7 to 2008/9 based on a 7 day week.

Table 4-1: Trips by borough of origin: Trips per day and shares by main mode, 2006/07 to 2008/09 average, Seven-day week

Mode	Greater London	Outer London	Harrow
Rail	4	3	0.8
Underground/DLR	7	3	6.4
Bus/tram	14	12	10.1
Taxi/Other	1	1	0.4
Car/motorcycle	41	51	51.9
Cycle	2	1	0.8
Walk	31	29	29.6
Non-car trips	59	49	48.1

Source: TfL, Travel in London, Report 2 - Appendix B

Risks, Issues / Problems

Harrow has very high car ownership and tackling modal shift in the borough is extremely difficult. It is likely that more can be achieved in increasing cycling in the borough than in other areas of modal shift. Cycling will benefit from the increases in cycling London wide through the Mayor's *cycling revolution* and additional routes becoming cycle friendly such as Newton Ecology Park and the Belmont Trail as well as all corridors being addressed in the borough through an increasingly holistic approach. There is an additional risk regarding the magnitude of the benefit to be achieved from new cyclists as many of the new trips may have previously been walking trips.

Achieving modal shift towards increased walking is far more difficult. However the promotion of walking through travel awareness events, increased awareness of health issues impacted by walking and promoted by Harrow Council and the PCT and the comparative cost of car use will all increase the attractiveness of walking as a modal choice. To maximise the benefit of a modal shift towards increased walking, it is important that the additional walking trips were previously made by less sustainable modes of transport.

Target

Boroughs are required to set targets on walking mode and cycling mode levels for this indicator.

The Mayor's Transport Strategy states an aim to achieve a 5% modal share for cycling by 2026. Harrow residents may account for about 13% of the potentially cyclable trips in the west London sub-region according to the recent TfL cycling segmentation work. Harrow's targets have been set with this in mind.

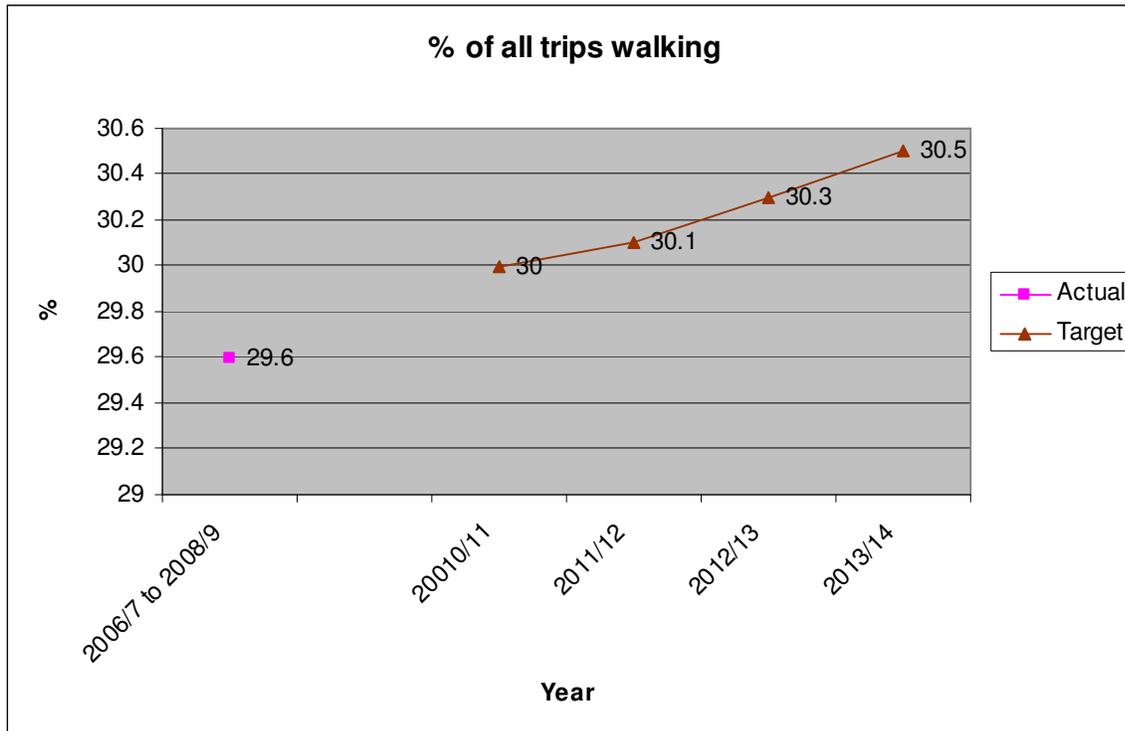
Harrow aims to achieve a 30.5% mode share for walking in 2013/14 and a 1.5% mode share for cycling in 2013/14.

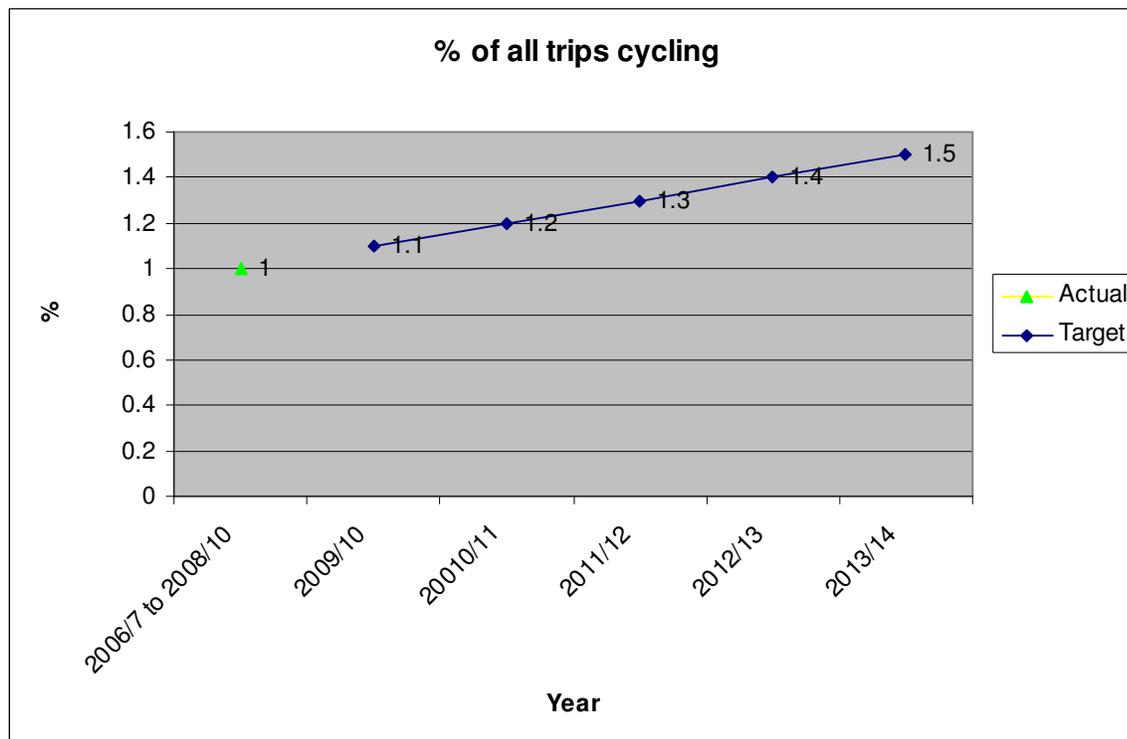
Over the longer term, Harrow is aiming to achieve the modal share for cycling outlined in the Mayor's Transport Strategy, an increase of 5% for modal share for cycling by 2026. This will most likely need to be reviewed at five yearly intervals.

Over the longer term, Harrow aims to achieve the modal share for walking of 31.5% by 2026. However, this will also need to be reviewed at five yearly intervals and there is currently insufficient data to support a more accurate target.

Trajectory

% of trips by walking	Average 2006/7 to 2008/9	29.6	2013/14	30.5	2010/11	2011/12	2012/13	2013/14
					30.0	30.1	30.3	30.5
% of trips by cycling / no of trips	Average 2006/7 to 2008/10	0.8	2013/14	1.5	2010/11	2011/12	2012/13	2013/14
					1.2	1.3	1.4	1.5





4.1.2 Bus service reliability

Definition

This indicator will measure Excess Wait Time for high frequency bus services (ones that have a frequency of five or more buses per hour). This is the waiting time experienced by passengers over and above what might be expected of a service that is always on time. Transport for London measures this indicator.

Key influences on this target in Harrow

Harrow will continue to work towards improving bus journey reliability and frequency within the borough by the holistic work being carried out in corridor schemes and by ongoing improvements in traffic enforcement and particularly bus lane enforcement. Improvements in bus stop accessibility will also improve bus times and reliability as those with mobility difficulties and carrying heavy shopping board and alight the buses quicker.

Data

	1999/2000	2008/9	2009/10	Percentage change 2009/10 from 1999/2000
Harrow	2.00	1.00	1.0	-45%
Greater London	2.07	1.13		-

Risks, Issues / Problems

Although Harrow can influence bus journey times and reliability while the bus travels within Harrow, excess wait time is largely impacted by the entire bus route journey which goes beyond the borough boundary. As a result of formula funding, Harrow's allocation for works has been considerably reduced. Historically the bus priority programme was very well funded and Harrow made significant progress in improving reliability of all routes. The new funding regime will not focus resources purely on buses and therefore future benefits are not expected to be as significant.

Target

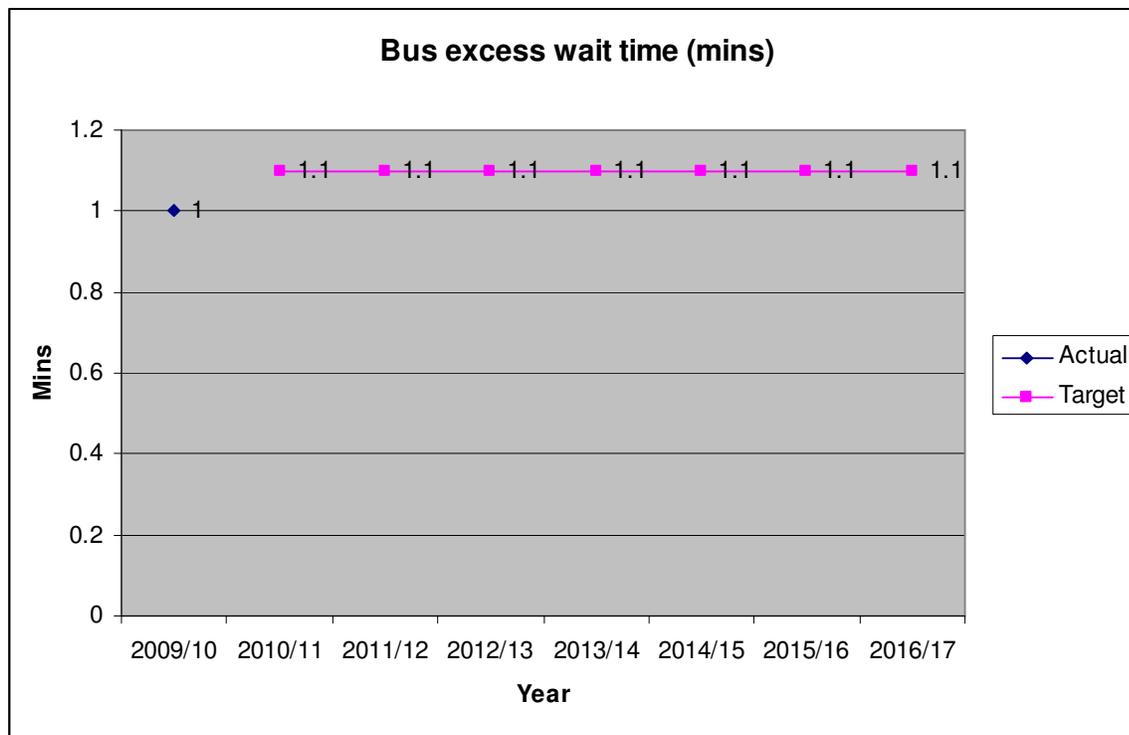
Excess wait time is heavily influenced by factors beyond the borough's sphere of influence. In particular, the bus journey reliability beyond the borough boundaries and high car ownership within the borough make it extremely hard to achieve a reduction in excess wait time. **Harrow has therefore set a target of maintaining an excess wait time of 1.1 minutes.**

TfL's Business Plan sets a target of excess waiting time for 2017/18 as 1.2 minutes. Based on the information currently available to the borough, Harrow accepts this as the long term target for excess waiting time for buses in the borough.

Trajectory

Excess wait time in mins	2009/10	1.0	2013/14	1.1
--------------------------	---------	-----	---------	-----

2010/11	2011/12	2012/13	2013/14
1.1	1.1	1.1	1.1



4.1.3 Asset condition

Definition

This will be measured by the proportion of the local authority's Principal Road Network where maintenance should be considered.

Key influences on this target in Harrow

The condition of roads can be severely impacted by the weather which exacerbates the problems on roads that have already deteriorated.

Data

This data is derived from Detailed Visual Inspection data supplied to TfL for each borough by the London Borough of Hammersmith and Fulham. Results are surveyed for all of the network in both directions.

Year	DVI data
2005/6	14.2
23006/7	10.0
2007/8	7.7
2008/9	7.0
2009/10	7.7

Risks, Issues / Problems

Severe snow falls, heavy rain and adverse heat can all affect the condition of roads as can frequent use by heavy vehicles. The reliability and consistency of the data and the ever changing methodology along with years of under funding has led to accelerated levels of deterioration of all roads. An evaluation of the backlog of maintenance issues is kept updated in the Borough's Highways Asset Management Plan.

Target

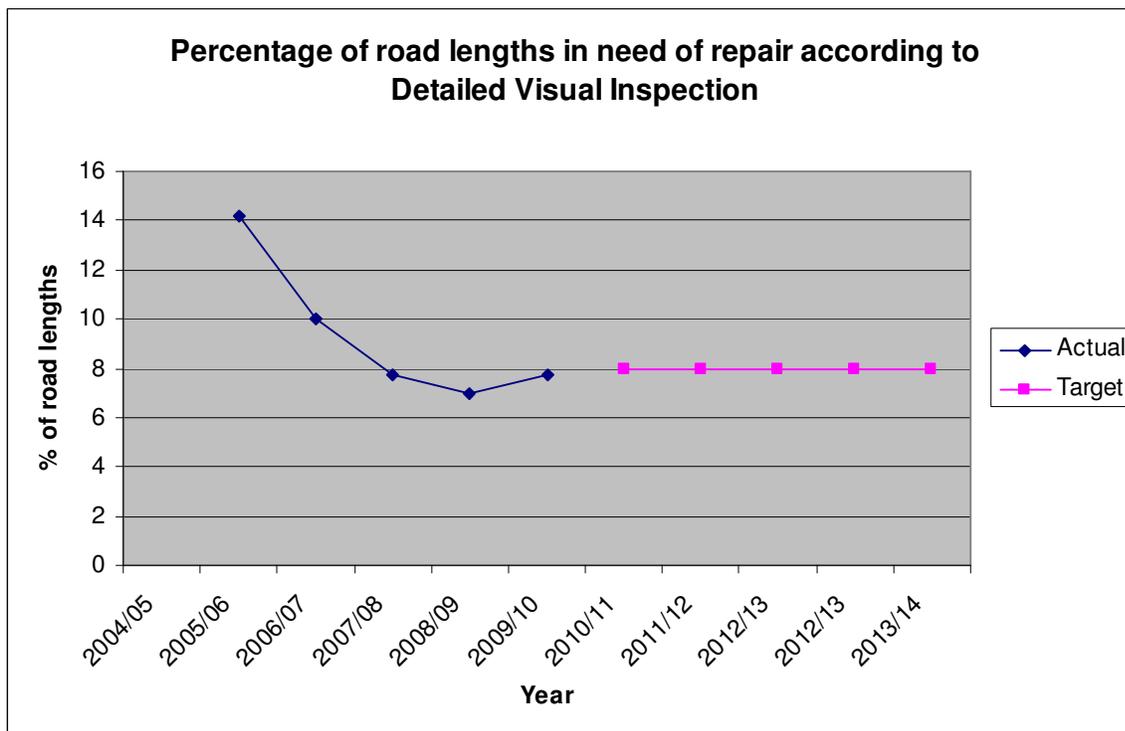
In order to reduce the % of principal road lengths in need of repair, Harrow Council will use all available data to prioritise works on a worst first basis. This is outlined in more detail in Harrow's Highways Asset Management Plan.

Harrow aims to achieve a target of 8% of principal road lengths in need of repair in 2013/14. The previous few years funding levels have enabled the DVI data to remain constant. Therefore, the borough is unlikely to exceed this target because funding is very unlikely to increase.

In the longer term the percentage of roads in need of repair is likely to remain at this level and Harrow's long term target for 2017/18 roads in need of repair is 8.0.

Trajectory

% length in need of repair	2009/10	7.7	2013/14	8.0	2010/11	2011/12	2012/13	2013/14
					7.7	8.0	7.7	8.0



4.1.4 Road traffic casualties

Definition

This will monitor the total number of people killed or seriously injured in road traffic accidents and total casualties for road accidents in Harrow.

Key influences on this target in Harrow

Reduced traffic speeds, traffic calming, 20mph zones introduced as part of corridors and neighbourhoods schemes and road safety education are the key ways that Harrow addresses this issue. In addition, cycle training and school travel plans will influence this. There are currently 21 schools in Harrow located in 20mph zones. Significant safety improvements will most likely come from additional 20mph zones around schools.

Data

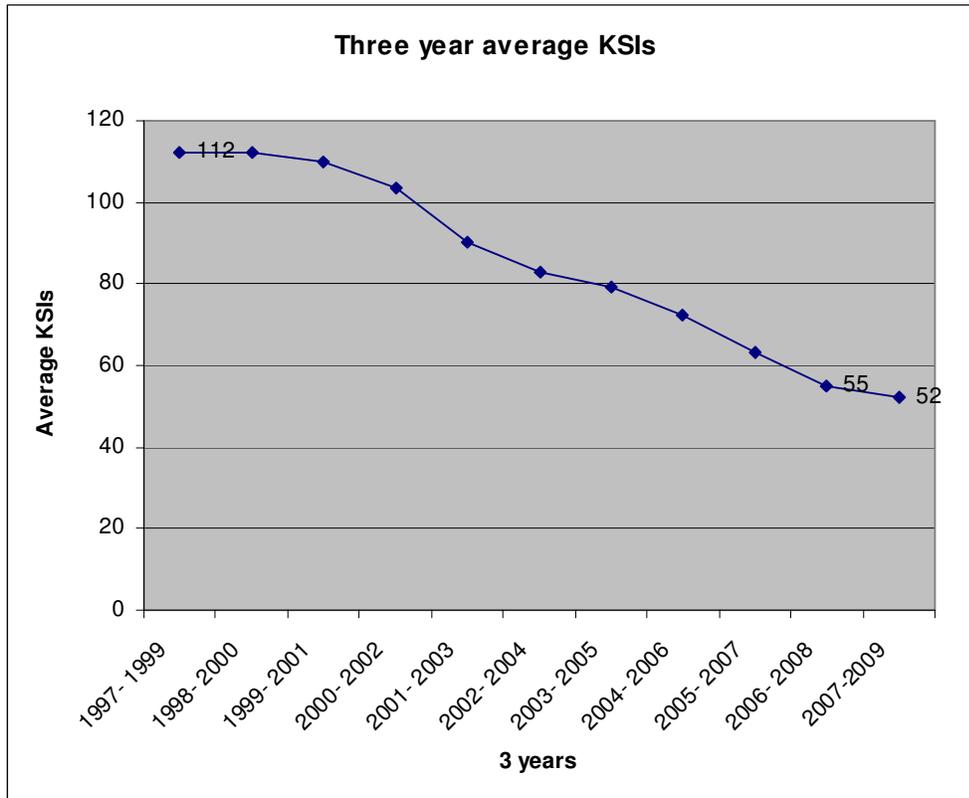
KSIs

Year	Total KSIs
2004	83
2005	76
2006	58
2007	55
2008	52
2009	49

KSIs considering 3 year rolling averages

	Average for 3 years number of KSIs
1994/98 average(baseline)	122
1997-1999	112
1998-2000	112
1999-2001	110

2000-2002	104
2001-2003	90
2002-2004	83
2003-2005	79
2004-2006	72
2005-2007	63
2006-2008	55
2007-2009	52



Total casualties

Year	Total casualties	Annual % change
2004	708	
2005	640	-9.6
2006	558	-12.8
2007	496	-11.1
2008	470	-5.2
2009	508	8.1

Risks, Issues / Problems

Harrow is already one of the safest boroughs in London and has continually made enormous progress in reducing road casualties. Making further reductions is therefore difficult for the borough. The increase in the total number of casualties reported in 2009 is probably a reflection of this. It is therefore likely that the annual casualties will fluctuate around this level for some time. There is some concern that the overall increase in cycling that will result from the Mayor's *cycling revolution* as well as local cycling measures will increase the number of cycling accidents. If this happens, the borough will refocus resources to address this issue.

The borough intends to prioritise addressing motorcycle casualties and specifically introduce accident prevention measures in areas where these have occurred as this is the area of key concern.

Target

KSIs

The DfT target under consideration is to reduce road deaths and serious injuries by at least 33% by 2020 compared with the baseline of average KSIs in the baseline of the 2004-08 average. This would result in a target of 59 KSIs by 2013. Harrow has already achieved this and therefore will set a stricter target than that of the DfT. **Harrow therefore intends to achieve a target of 42 KSIs or less for the years 2012 to 2014.** This is a reduction of 2KSIs per year. Harrow will set a long term target for KSIs at 40 per year. However this will need to be reviewed as more data becomes available.

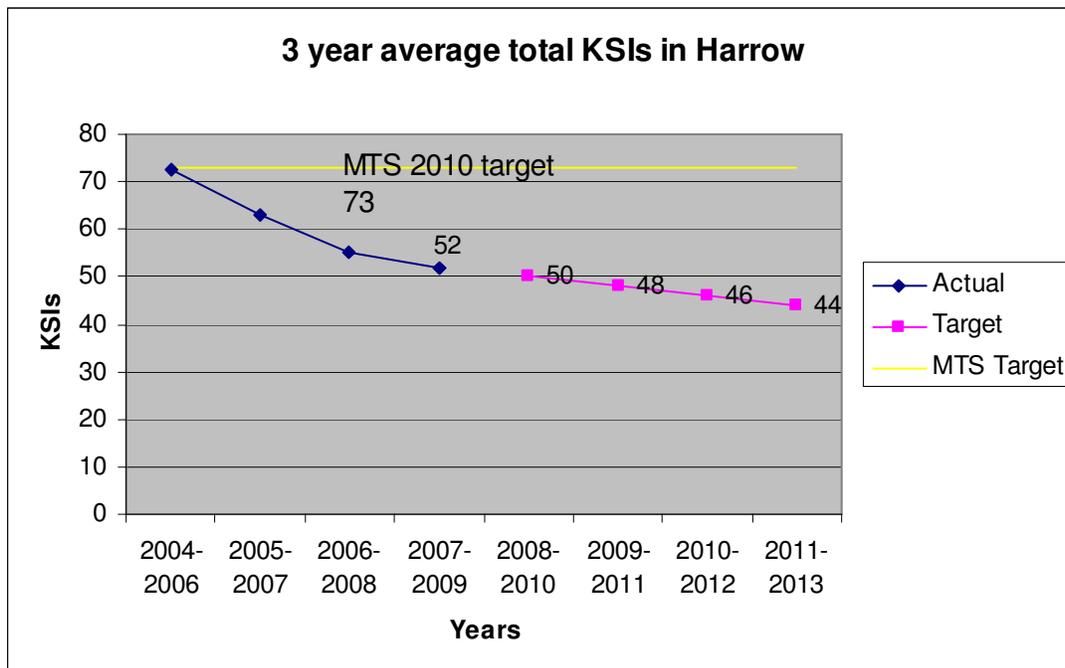
All casualties

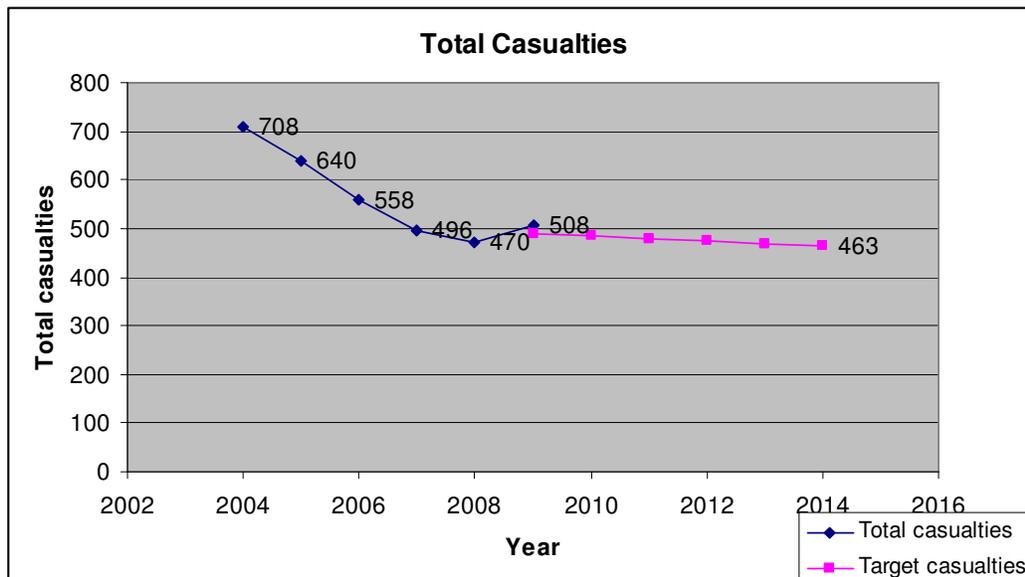
The average number of total casualties for 2004/8 is 574. Based on this Harrow will aim to achieve a reduction in casualties of 25% by 2020. Therefore Harrow's long term target is to achieve 431 casualties per year or less. However this longer term target will need to be reviewed as more data becomes available. **This equates to a target of 468 total casualties for 2012/14.**

Trajectory

Total 3 year average of number of people killed or seriously injured	3 years 2006 to 2008	55	2012/14	42
Total casualties	5 years average 2004 to 2008	574	2012/14	468

2009/11	2010/12	2011/13	2012/14
48	46	44	42
2009/11	2010/12	2011/13	2012/14
485	479	474	468





4.1.5 CO₂ emissions

This indicator is based on the Mayoral commitment to reduce emissions of CO₂ in London by 60% from 1990 levels by 2025. The Mayoral target includes all emissions. Road transport forms just 16% of these emissions.

Definition

This indicator is based on the GLA's London Energy and Greenhouse Gas Emissions Inventory (LEGGI inventory).

Key influences on this target in Harrow

Increased use of electric vehicles, reduced car usage, increased trees planted, increases in sustainable forms of travel will all influence CO₂ emissions in the borough. The borough encourages use of more environmentally friendly vehicles by offering free parking permits in Harrow's controlled parking zones for "greener" cars. In addition, in procuring new vehicles the council requires consideration of the need to reduce vehicle emissions.

Data

In 2008 CO₂ emissions from ground based transport tonnes per capita as reported by LEGGI was 159k tonnes per year.

Risks, Issues / Problems

Despite the Council's activities to reduce CO₂ emissions in the borough, the influence the borough can have on CO₂ emissions from ground-based transport is minimal. This is partly because car ownership is extremely high in Harrow and higher than the rest of London. Average car/van ownership for the whole borough was 1.2 vehicles per household despite 23% of households having no car or van according to the 2001 census. The greatest influence on reducing ground based transport CO₂ emissions will be on any reduction in traffic flow although there will be some improvements as a result of an increase in cleaner cars on the road. However, as unemployment is forecast to rise in the next few years, traffic is likely to drop as people opt for cheaper forms of transport such as walking, cycling and public transport. This will all help the Council in achieving this target.

Target

The policies set out in the Government's Low Carbon Transition Plan, and in more detail in the Low Carbon Transport: A Greener Future, aims to cut emissions from transport by 14% on 2008 levels by 2020.

According to the latest advice provided by TfL, based on total Ground Based Transport emissions in 2008, a 45.3% reduction is required between 2008 and 2025. This equates to a 3.49% reduction per year, in respect of the previous year.

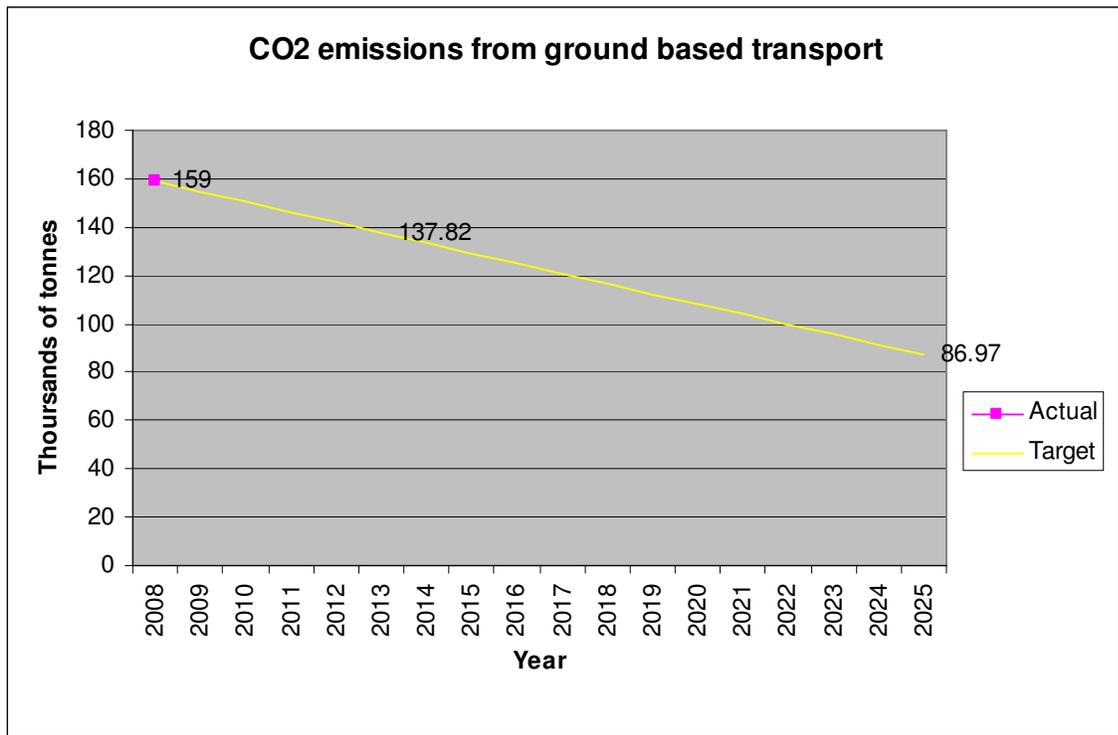
Based on this, the target for Harrow emissions from ground based transport is 137.82 tonnes per year in 2013.

In the longer term, Harrow aims to achieve a similar reduction to the rest of London and achieve the Mayor’s target for a 60% cut in CO₂ emissions by 2025. This equates to a target of 86.97 k tonnes.

Trajectory

Harrow has chosen to predict a linear trajectory for the first few years of this target but will need to review this at regular stages.

CO ₂ emissions	2008	159	2013	137.82	2010	2011	2012	2013
					150.53	146.29	142.05	137.82



4.2 Additional local indicators

4.2.1 Harrow will be monitoring the impact of LIP2 beyond the mandatory targets. Additional monitoring information that is freely available will, where possible, also be used. The Council already uses National Indicators (NI) as measures to provide clear and comparable information between authorities and for partners and Government. Although these have been abolished by National Government, they will still be a useful source of information for monitoring the impact of LIP2. It is

important that indicators remain unchanged for several years, however it is likely that Harrow will revise these as their usefulness is reviewed. Harrow intends to consider the following additional local indicators:

- The number of schools located within a 20mph zone in the borough
- Cycle parking spaces per total school headcount
- Annual percentage pupils cycling to school
- Number of motorcycle casualties
- Weekday bus run times based on i-bus average weekday run time times for sections of routes H12, H9, H10, 140 and 114 in the borough
- NI 198 - Proportion of school aged children in full time education travelling to school by car
- The number of environmentally friendly vehicle parking permits issued in the borough

4.2.2 More information on each of these local indicators is provided below:

i). The number of schools located within a 20mph zone in the borough

This indicator will initially be a count of the number of schools within a 20mph zone. Following an analysis of the locations of all schools in the borough, this indicator will be revised to be the proportion of schools within a 20mph zone in the borough but will exclude schools currently not located on local roads. This indicator is important to the borough as it will help us to monitor our success in achieving objectives 3 and 9 and has significant local support.

This indicator is influenced by funding available and results of public consultations.

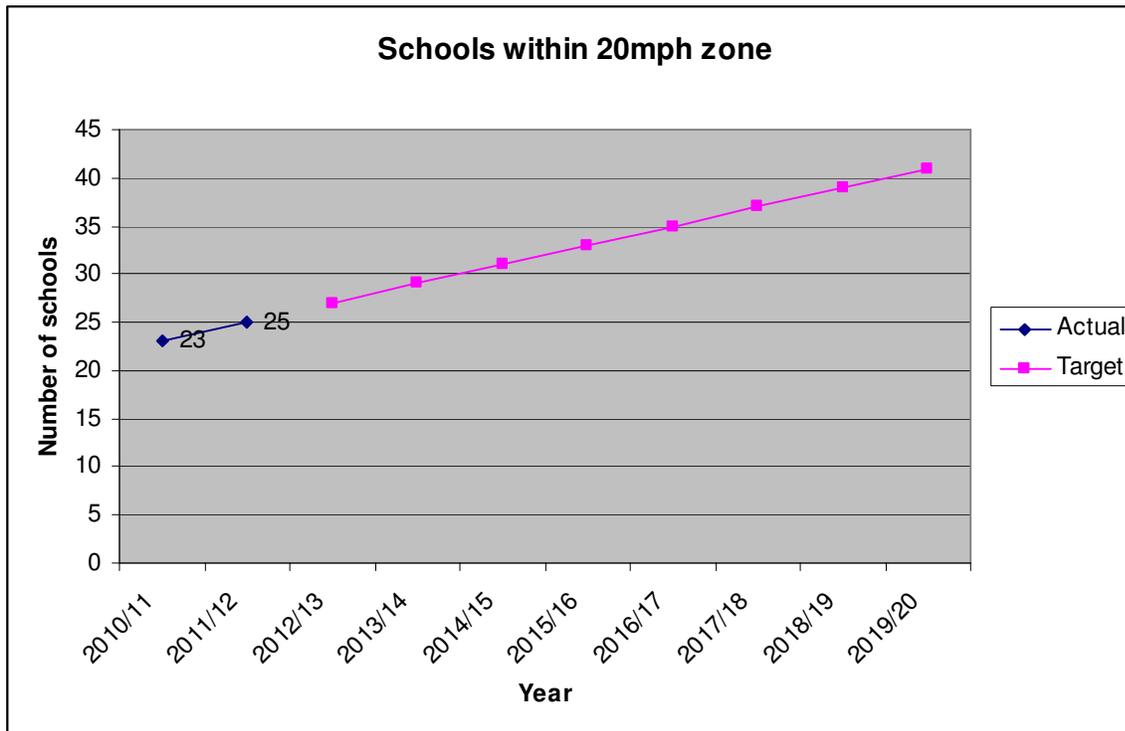
The borough intends to ensure that two additional schools are included within 20mph zones each year.

This implies a target of 29 schools in 20mph zones in 2013/14.

If funding remains the same, a long term target for 2019/20 will be 43 schools in 20mph.

Trajectory

Schools within 20mph zones	2009	21	2013/14	29	2010/11	2011/12	2012/13	2013/14
					23	25	27	29



ii). *Cycle parking spaces per total school headcount*

This will provide the borough with information about the cycling opportunities available to Harrow school children in the borough. It is important to know this so that we can be sure that the opportunities for all school children to cycle are increasing.

This indicator is influenced by funding available, schools commitment to increasing sustainable modes of travel, available school infrastructure and location and latest cycle accident data.

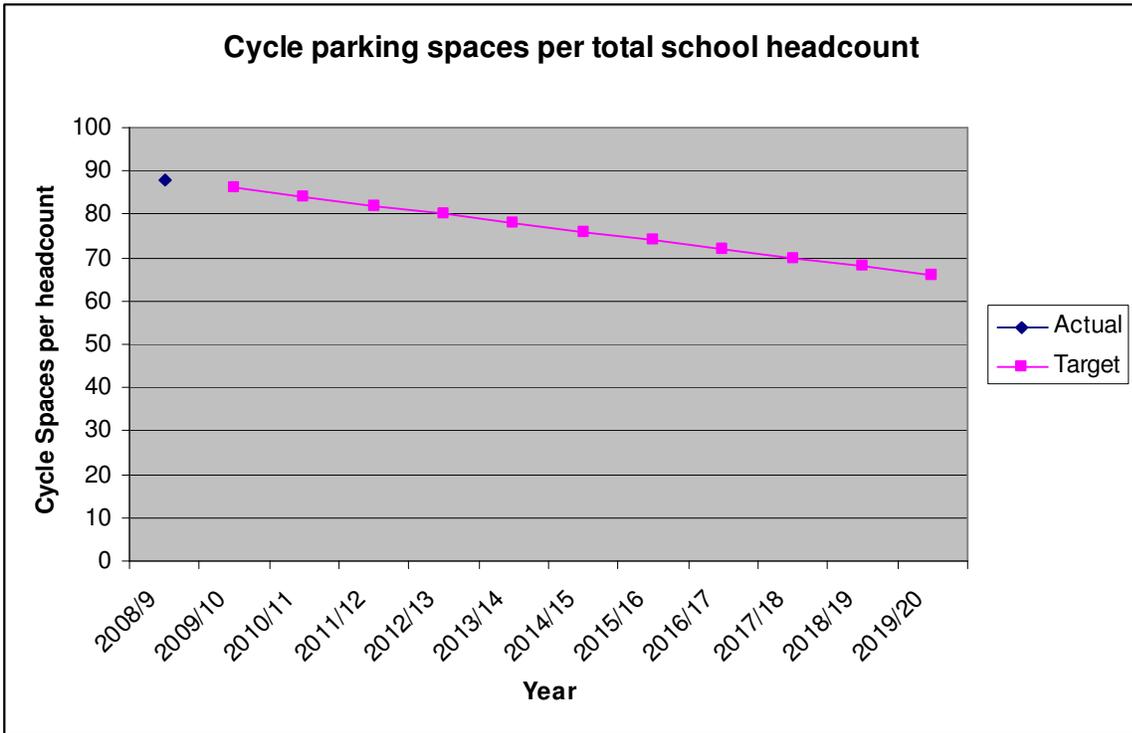
This indicator is of significant importance as increasing cycling is a major issue for the borough as identified in objectives 3 and 9.

In 2008/9 there were 88 school pupils per cycle parking space.

Harrow aims to achieve a target of 78 school pupils per cycle parking space by 2013/14. In the longer term, by 2019/20, Harrow aims to achieve a target of 66 pupils per cycle parking space.

Trajectory

School pupils per cycle parking spaces	2008/09	88	2013/14	78	2010/11	2011/12	2012/13	2013/14
					84	82	80	78



iii). *Annual percentage pupils cycling to school*

This will provide an indicator to see the extent of the cycle uptake by school children in the borough. This is a key indicator for the borough as cycling affects much of what Harrow wants to achieve including improving children’s health and improving the environment.

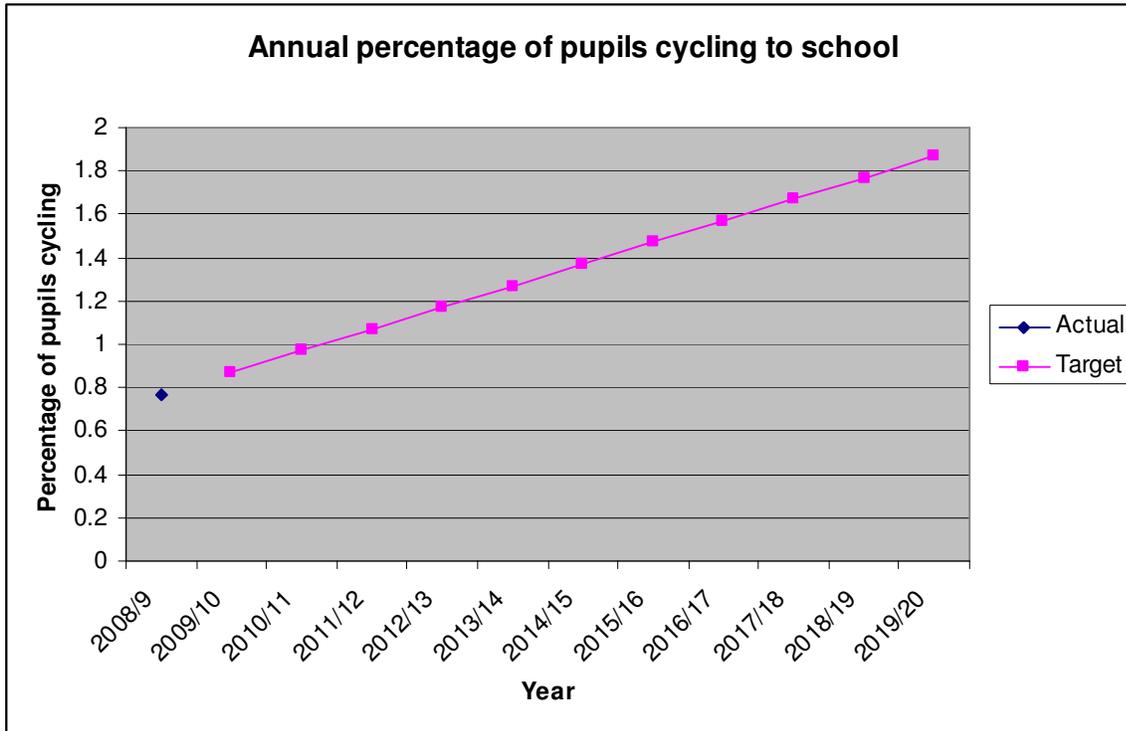
This indicator is influenced by attitudes to safety, availability of safe and secure cycle parking at schools, parental attitudes to cycling, the weather and the schools support for sustainable transport.

This indicator is of significant importance as increasing cycling is a major issue for the borough as identified in objectives 3 and 9.

Harrow aims to achieve a target of 1.27% of pupils cycling to school by 2013/14. In the longer term Harrow aims to achieve a target of around 1.87% by 2019/20.

Trajectory

Percentage pupils cycling to school	2008/09	0.77	2013/14	1.27	2010/11	2011/12	2012/13	2013/14
					0.97	1.07	1.17	1.27



iv). Number of motorcycle casualties

This is a key area of concern for Harrow. The borough has successfully reduced all traffic casualties to record low figures. However the rise in motorcycle casualties is not following this trend and is a cause of concern. As identified in objective 6, this is a key issue for the borough.

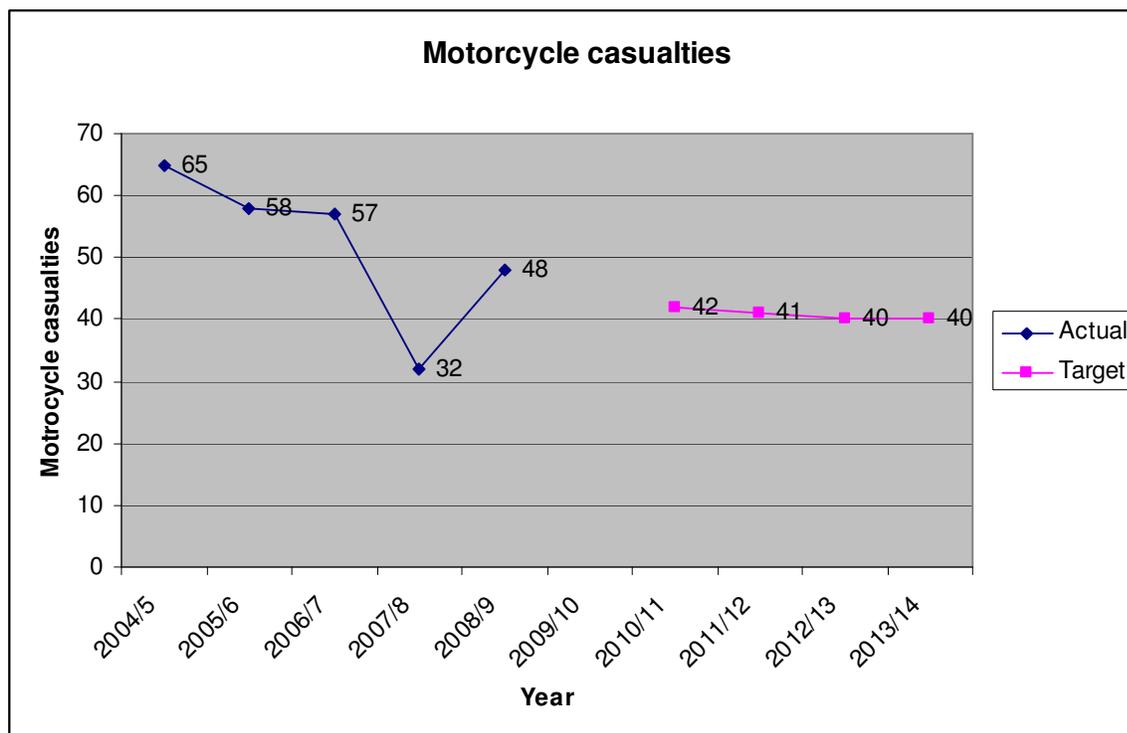
This indicator is influenced by available funding both to promote motorcycle safety and to address potentially dangerous locations, motorcyclists' attitudes to risk, weather, and the overall increase in motorcyclists.

A target has been set for this to reduce the number of motorcyclist casualties to around 40 per year by 2013/14. This has been set to ensure we are continually reducing casualty numbers but are not unrealistic in our expectations.

Harrow aims to achieve a target of 40 motorcycle casualties or less by 2013/14. In the longer term Harrow aims to achieve maintain this target of around 40 motorcycle casualties or less by 2019/20.

Trajectory

Number of motorcycle casualties	Average 2004 to 2008	52	2013/14	40	2010/11	2011/12	2012/13	2013/14
					42	41	40	40



v). *Weekday bus run times*

Bus run times are a useful indicator to measure bus speeds in the borough and also changes in the level of congestion on the roads being considered.

The indicator will be affected by many factors which include overall levels of congestion, the wider economy, bus fares and bus reliability.

Bus run times are key to achieving objectives 1, 2, 4, 5, 8, 10 and 12.

The target for each of the selected routes chosen to monitor will be to maintain the current journey time in 2013/14. A stricter target has not been set because the financial allocation that Harrow is able to invest in bus route improvement has been so dramatically cut and is unlikely to increase during this time period.

The long term target for each of the selected routes will also be to maintain the current journey times.

Bus routes being measured are as follows:

Route	Section of route	i-bus weekday run time Base year value 2010 (mins)	i-bus weekday run time Target year 2013 (mins)
H12	W/B between High Rd and Pinner Grn	13.2	13.2
H12	E/B between High Rd and Pinner Grn	13.8	13.8
H9	Kings Rd and Harrow View	9	9
H10	Kings Rd and Harrow View	9.3	9.3
140	N/B between College Rd and The Bridge	1.7	1.7
140	S/B between College Rd and The Bridge	1.5	1.5

114	W/B between Turner Rd and Burnt Oak Broadway	2.9	2.9
114	E/B between Turner Rd and Burnt Oak Broadway	4.2	4.2

vi). *The number of environmentally friendly vehicle parking permits issued*

The borough has many incentives to encourage uptake of environmentally friendly vehicles. This measure will enable us to know how successful we have been in this area. This indicator will also help us achieve objective 4.

This indicator is affected by the overall economy and attitudes to global warming.

There is no target for this indicator, though the borough is seeking to increase the number of permits issued.

Core indicator	Definition	Year type	Units	Base year	Base year value	Target year	Target year value	Trajectory data				Data source
								2010/11	2011/12	2012/13	2013/14	
Mode share of residents	% of trips by walking	Calendar	%	Average 2006/7 to 2008/9	29.6	2013/14	30.5	30.0	30.1	30.3	30.5	LTDS
Mode share of residents	% of trips by cycling / no of trips	Calendar	%	Average 2006/7 to 2008/10	0.8	2013/14	1.5	1.2	1.3	1.4	1.5	Specify LTDS or borough's own screenline counts
Bus service reliability	Excess wait time in mins	Calendar	Mins	2009/10	1.0	2013/14	1.1	1.1	1.1	1.1	1.1	iBus
Asset condition - principal roads	% length in need of repair	Calendar	%	2009/10	8	2013/14	8	7.7	8.0	7.7	8.0	Detailed Visual Inspection (DVI) data supplied for each borough to TfL by LB Hammersmith and Fulham
Road traffic casualties	Total number of people killed or seriously injured	Calendar	Number	Average 2006 to 2008	55	2012/14	42	48	46	44	42	London Road Safety Unit
Road traffic casualties	Total casualties	Calendar	Number	Average 2004 to 2008	574	2012/14	468	485	479	474	468	London Road Safety Unit
CO2 emissions	CO2 emissions	Calendar	KiloTonnes/year	2008	159	2013	137.82	150.53	146.29	142.05	137.82	GLA's London Energy and Greenhouse Gas Emissions Inventory (LEGGI)

Additional (non-mandatory) local indicators

Local indicator	Definition	Year type	Units	Base year	Base year value	Target year	Target year value	Trajectory data				Data source
								2010	2011	2012	2013	
Schools within 20mph zones	The number of schools located within a 20mph zone in the borough	Calendar	% of schools	2009	21	2013	29	23	25	27	29	Borough audit

Core indicator	Definition	Year type	Units	Base year	Base year value	Target year	Target year value	Trajectory data				Data source
								2010	2011	2012	2013	
School pupils per cycle parking space	Ratio	Calendar	Ratio	2008/9	88	2013/14	78	2010	2011	2012	2013	School travel plans
								84	82	80	78	
Percentage of school travel by bicycle	Percentage	Calendar	%	2008/9	0.77	2013/14	1.27	2010/11	2011/12	2012/13	2013/14	School travel plans
								0.97	1.07	1.17	1.27	
Number of motorcycle casualties	Casualty number	Calendar		Average 2004 to 2008	52	2013/14	40	2010/11	2011/12	2012/13	2013/14	London Road Safety Unit
								42	41	40	40	
Weekday Bus run times	i-bus average weekday run time rt H12 W/B between High Rd and Pinner Grn	March only	Mins	2010	13.2	2013	13.2	2010	2011	2012	2013	i-bus
								13.2	13.2	13.2	13.2	
	i-bus average weekday run time rt H12 E/B between High Rd and Pinner Grn	March only	Mins	2010	13.8	2013	13.8	2010	2011	2012	2013	i-bus
								13.8	13.8	13.8	13.8	
	i-bus average weekday run time rt H9 between Kings Rd and Harrow View	March only	Mins	2010	9	2013	9	2010	2011	2012	2013	i-bus
								9	9	9	9	
	i-bus average weekday run time rt H10 between Kings Rd and Harrow View	March only	Mins	2010	9.3	2013	9.3	2010	2011	2012	2013	i-bus
								9.3	9.3	9.3	9.3	
i-bus average weekday run time rt 140 N/B between College Rd and The Bridge	March only	Mins	2010	1.7	2013	1.7	2010	2011	2012	2013	i-bus	
							1.7	1.7	1.7	1.7		
i-bus average weekday run time rt 140 S/B between College Rd and The Bridge	March only	Mins	2010	1.5	2013	1.5	2010	2011	2012	2013	i-bus	
							1.5	1.5	1.5	1.5		
i-bus average		March only	Mins	2010	2.9	2013	2.9	2010	2011	2012	2013	i-bus

Core indicator	Definition	Year type	Units	Base year	Base year value	Target year	Target year value	Trajectory data				Data source
	weekday run time rt 114 W/B between Turner Rd and Burnt Oak Broadway							2.9	2.9	2.9	2.9	
	i-bus average weekday run time rt 114E/B between Turner Rd and Burnt Oak Broadway	March only	Mins	2010	4.2	2013	4.2	2010	2011	2012	2013	i-bus
								4.2	4.2	4.2	4.2	
NI 198 Proportion of school aged children in full time education travelling to school by the mode of travel that they usually use.		Financial	% of school aged children whose main mode is car	2007/8	34%	2012/13	29%	2009/10	2010/11	2011/12	2012/13	School census
								32%	31%	30%	29%	
								0	30	50	100	
The number of environmentally friendly vehicle parking permits issued in the borough		Calendar	Total number issued	2010	27	2013		2010	2011	2012	2013	Borough count
								27				

4.3 Output reporting

The Mayor's high profile outputs will be reported on an annual basis to show progress being achieved in implementing the Mayor's Transport Strategy and in achieving Harrow's LIP2 objectives. This will also enable the Mayor to monitor his targets for London regarding his commitments to provide additional cycle parking, create radial cycle superhighways, provide electric vehicle charging points, provide better streets, ensure the use of cleaner local authority fleets and provide more street trees.

4.4 Linking objectives, indicators and outputs

The following table shows the link between Harrow's LIP2 objectives and the Mayor's mandatory indicators and the related Mayoral outputs to be reported.

Table 4-2: Objective links to Mayor’s indicators and related outputs

Objective	Mandatory indicators	Related Outputs
1. Ensure that the transport system provides access to employment opportunities within and beyond the borough and also supports improved access to a wide range of facilities, such as retail centres and education and health services as well as access to cultural heritage and outdoor green spaces	Mode share Asset condition	Cycling
2. Support improved orbital transport links across the Borough and between outer London centres thereby providing greater access to a wider catchment area for employment opportunities by enabling journeys currently made by car to be made by sustainable forms of transport and thereby improve the environment	Bus service reliability Asset condition	Buses
3. Promote healthy and safe travel particularly for pedestrians and cyclists	Mode share Asset condition Road traffic casualties CO ₂ emissions	Cycling Walking Road safety and personal security Smarter travel Environment Local area accessibility
4. Reduce CO ₂ emissions in Harrow, increase environmental sustainability, improve air quality and deliver a better quality of life through the use of travel planning and appropriate traffic engineering measures including providing improved facilities for pedestrians and cyclists	CO ₂ emissions Mode share	Cycling Walking Road safety and personal security Buses Smarter travel Environment Controlled parking Freight Cleaner local authority fleets
5. Regenerate Harrow Town Centre and new Area of Intensification and ensure that the transport delivery needs of the Area of Intensification are	Bus service reliability Mode share	Cycling Walking Road safety and personal security

Objective	Mandatory indicators	Related Outputs
prioritised		Buses Smarter travel Environment Local area accessibility Freight
6. Reduce the number of motorcycle casualties across the borough	Mode share Road traffic casualties	Road safety and personal security
7. Improve the quality, capacity and accessibility of Harrow-on-the-Hill station and Harrow bus Station and improve the accessibility ,efficiency and attractiveness of public transport borough wide and in particular Transport for London stations	Mode share Asset condition	Cycling Walking Road safety and personal security Buses Local area accessibility Controlled parking Freight
8. Improve transport connectivity between Harrow-on-the-Hill station/Harrow bus station and Harrow & Wealdstone station	Mode share Bus service reliability	Buses Environment Controlled parking
9. Increase the number of people cycling in the borough in order to improve public health, improve air quality, reduce congestion and to reduce the impact of climate change	Mode share Road traffic casualties	Cycling Smarter travel Environment
10. Improve the efficiency of servicing and delivery, reduce congestion and make essential car journeys easier	Bus service reliability Mode share	Cycling Walking Road safety and personal security Buses Smarter travel Environment Local area accessibility Controlled parking Freight

Objective	Mandatory indicators	Related Outputs
11. Improve pedestrian walkways that use and link existing parks and open spaces with town centres and public transport provision	Mode share Asset condition	Walking Environment
12. Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport	Bus service reliability Mode share Asset condition	Cycling Walking Buses Smarter travel Environment Local area accessibility Controlled parking Freight

4.5 Monitoring LIP2 progress

- 4.5.1** To ensure the LIP2 delivery programme is achieving the desired results, the borough will monitor progress through both the outcomes and outputs discussed in this chapter. On an annual basis, the borough will submit a report to TfL on the Mayor's high profile outputs on cycle superhighway schemes, cycle parking, electric vehicle charging points, better streets, cleaner local authority fleets and street trees. In addition, through a formal meeting with TfL, progress on delivery of the LIP2 programme as well as mandatory and non-mandatory targets and indicators will also be reviewed.
- 4.5.2** At the end of the second LIP period, in 2014, the borough will prepare and publish a three-year impact report setting out the expenditure and implementation of LIP2 programmes, target achievement and evidence of how LIP2 has contributed to the wider policy objectives for Harrow.

Appendix A: Equality impact of LIP2

Equality Target Group	Positive impact		Negative impact	Reason for potential benefits
	High	Low		
MOBILITY				
People with mobility difficulties	✓			Increased number of bus stops which meet DDA requirements; improved accessibility to public transport; increased number of dedicated parking for people with disabilities and through increased numbers of CPZs; increased opening hours for Shopmobility; plus benefits from environmental improvements; safer roads and street environment and improved walking environment
AGE				
Elderly	✓			Increased number of bus stops which meet DDA requirements; improved accessibility to public transport; increased number of dedicated parking for people with disabilities and through increased numbers of CPZs; environmental improvements; and safer roads and street environment and improved walking environment
Younger people and children	✓			More cycle training; safer environments around schools through increased 20mph zones; improved walking environment and general environmental improvements
GENDER				
Women		✓		More cycle training; safer roads and street environment; improved walking environment; and general environmental improvements
Men		✓		More cycle training; safer roads and street environment; improved walking environment; and general environmental improvements
RACE				

Equality Target Group	Positive impact		Negative impact	Reason for potential benefits
	High	Low		
Ethnic minorities		✓		More cycle training; safer roads and street environment; improved walking environment; and general environmental improvements
Mixed race		✓		More cycle training; safer roads and street environment; improved walking environment; and general environmental improvements
White including Irish		✓		More cycle training; safer roads and street environment; improved walking environment; and general environmental improvements
SEXUAL ORIENTATION				
Lesbian, Gay, Bisexual		✓		More cycle training; safer roads and street environment; improved walking environment; and general environmental improvements
Transgender		✓		More cycle training; safer roads and street environment; improved walking environment; and general environmental improvements
RELIGIOUS				
Faith groups		✓		More cycle training; safer roads and street environment; improved walking environment; and general environmental improvements

There are no negative impacts on any specific equality target group identified from implementing this plan.

Appendix B: Actions to meet Mayoral and Harrow objectives

Future reference	Joined up public policies	
J1	G2.8	The council will consider the improvement of local access by walking, public transport, motorcycling and cycling as a core element in future regeneration programmes for local centres and employment areas
J2	G2.9	Ensure all projects consider their air quality and noise impact and that where possible mitigation is introduced to minimise adverse impacts
J3	G3.9	Work with schools to consider staggering school end times by a variety of measures including encouraging more school to introduce before and after school activities
J4	G5.3	Promote growth in areas of greatest public transport to encourage residual travel by public transport, walking and cycling
J5	G5.2	Promote mixed use development in growth locations to reduce the need to use a vehicle for trips between residential, retail, leisure and employment areas
J6	G5.4	Promote the use of travel plans for all educational establishments, hospitals and other places of work and where appropriate work with organisations to improve site specific travel plans
J7	G5.7	The council will request all providers or users of transport fleets to consider how they can move towards the use of less polluting vehicles.
J8	H1.20	Encourage schools to work with the council to review catchment areas and intake policies to ensure that the transport implications of these are fully taken into account. The focus will be on avoiding decisions that exacerbate the need to travel without strong educational or social reasons and consider changing policy to reduce the need to travel by car
J9	H1.35	The council will support health providers in their consideration and provision of more local facilities, clinics and more home services.
J10	H1.36	Request the local Metropolitan Police to review their enforcement priorities in the context of this Plan to ensure that they are consistent and action necessary changes
J11	G2.7	Consider the improvement of local access by walking, public transport, motorcycling and cycling as a core element in future regeneration programmes for local centres and employment areas

Future reference	Public Transport	
PT1	H1.1	Work with TfL to improve the penetration and expansion of local bus services into every local neighbourhood area – either by extending existing routes or, where necessary, by promoting new routes – this will be subject to the evaluation of the local impact of any additional bus services
PT2	H1.2	Encourage the provision of 'transport hub' facilities where these can serve wide catchment areas and connect up Harrow's and London's

Future reference	Public Transport	
	public transport network	
PT3	H1.3	<p>The council will seek to secure a fully integrated approach to the provision and operation of public transport services within Harrow, including:</p> <ul style="list-style-type: none"> • Improving the ease and convenience of approach routes to service access points, and the quality and clarity of the access signing • Taking account of the specific needs of people with impaired sight or impaired mobility. • Improved taxi facilities at rail and underground stations
PT4	H1.6	Persuade TfL to concentrate on continuing to improve public transport service reliability ensuring improved radial and orbital services
PT5	H1.7	Work with TfL to prioritise available resources to provide the road space and traffic regulatory / management infrastructure to support development of the bus services as well as additional bus services
PT6	H1.4	Deploy full range of available bus priority measures ensuring that measures are designed to reduce problems for all modes
PT7	H1.5	Enforce all road traffic, parking and waiting regulations in the interests of improving bus priority. Where possible engineering solutions will be used to minimise the need for additional enforcement.
PT8	H4.1	Work towards introducing a fully integrated, accessible bus and underground station at Harrow on the Hill.
PT9	H4.2	In partnership with public transport service providers and regulators, seek to ensure that all stations and bus stop locations in the Borough are progressively improved with the intention of developing at access points, if appropriate, a fully wheelchair-accessible boarding / alighting points, as a basis for supporting a network of fully wheelchair-accessible scheduled bus services
PT10	H1.13	The council will prepare and publish a public transport leaflet and map, and will update and distribute copies as needed
PT11	G1.1	Lobby TfL to improve the quality, capacity and accessibility of Harrow-on-the-Hill station and Harrow bus station.
PT12	G1.2	Work with TfL to improve bus service reliability and to improve orbital bus links between the town centres and major employment locations and to other key destinations within Harrow and neighbouring boroughs.
PT13	G1.5	Improve transport connectivity within the Intensification Area between Harrow Town Centre and Wealdstone including the provision of in-station cycle parking.
PT14	G4.1	Petition TfL to bring forward improved accessibility of Harrow on the Hill station as a priority in support of Harrow town centre and to facilitate the levels of growth proposed for the Harrow & Wealdstone Intensification Area, and improve the accessibility of all other stations where there is no disabled access
PT15	G2.1	Work with TfL to improve the frequency and reliability of weekend and late night public transport services to/from Central London
PT16	G2.2	Work with TfL to provide buses that take routes that will reduce numbers of children interchanging on buses across the network at the end of the school day
PT17	G2.4	The council will seek to work with public transport providers and regulators to ensure that engineering works and service closures are

Future reference	Public Transport	
		coordinated to minimise passenger inconvenience.
PT18	G3.6	Work with public transport providers and regulators as well as the Metropolitan Police in promoting safer travel initiatives such as Harrow's Safer Travel at Night and Cabwise - safer use of minicabs
PT19	G4.2	Seek to ensure that all stations and bus stop locations in the Borough are progressively improved as a basis for supporting a network of fully wheelchair-accessible scheduled bus services.
PT20	G4.3	Increase the number of bus stops in the borough which are DDA compliant
PT21	H2.23	The council will work with the key regulators and providers of rail, Underground and bus services within the Borough to progressively improve the network in terms of capacity and reliability.
PT22	H2.24	Build on existing liaison arrangements with those parties responsible for regulating and operating public transport services in the Borough – issues discussed will include concerns of public transport users with both TfL bus and all rail operators and will include bus driving standards, bus emissions, driver behaviour, bikes on buses and trains, as well as general service provision
PT23	H2.25	Work in partnership with public transport service providers and regulators, seek to ensure that all stations and bus stop locations in the Borough are progressively improved to offer a safe, secure and passenger-friendly environment and appropriate 'state-of-the-art' passenger interchange
PT24	H1.40	Work with TfL and bus operators to ensure adequate off-highway facilities are available for the storage and maintenance of buses at appropriate locations and to ensure that bus stands are appropriately located

Future reference	Walking	
W1	H2.1	Work with borough primary schools to encourage additional school walking buses and support existing walking buses
W2	H2.2	Ensure that all aspects of the walking environment are effectively considered when delivering works for major schemes, neighbourhood and corridor improvements. This will include signage, barriers and permeability and design to facilitate pushchairs or wheelchairs
W3	H2.4	Encourage active walking as a mode of transport
W4	H2.9	Increase the amount and variety of trees and plants across the Borough's open spaces and within streetscapes.
W5	H2.10	In all neighbourhoods, corridors and major schemes the borough will consider the Better Streets principles and in particular the need to reduce clutter, improve traffic management, increase the permeability of streets, creating spaces that make it easier for cyclists, pedestrians and disabled people to get about.
W6	H5.6	Provide effective alternatives to the car to encourage modal shift and increase provision for non-motorised modes of travel including

Future reference	Walking	
		cycling on all local access roads and treating walking as a priority travel mode, to be treated on a par with other means of transport
W7	H2.19	Encourage recreational walking and work in partnership with health providers to continue to promote walking specifically linked to health policy
W8	H2.20	Ensure that walking links to parks and open spaces are fully considered in new neighbourhood and corridor funded programmes
W9	H2.21	Address the identified areas of deficiency regarding access to parks and open spaces through improved cycling and walking infrastructure as shown in Harrow PPG17 study (2010)
W10	G2.8	Improve access to Harrow's green spaces and historic areas and improve pedestrian walkways that use and link existing parks and open spaces with the town centre and transport interchanges.
W11	G2.12	Work to implement the statement of action identified in Harrow's Rights of Way Improvement Plan in order to: <ul style="list-style-type: none"> • Extend the rights of way network to provide for new routes • Improve public information and publicity about the rights of way • Improve overall accessibility of the network to all but giving particular consideration to those with mobility difficulties
W12	G3.13	The council will work with the Metropolitan Police in using their powers of enforcement to deal with illegal cycling on pavements and footpaths
W13	G4.9	Take into account the needs of those with mobility difficulties who would benefit from additional seating in all new schemes giving particular consideration to road side seating in areas beyond the town centres which would enable many people to take short walking trips outside their own homes.
W14	H2.22	Ensure that walking permeability (a multiplicity of routes to give easy accessibility to, from and within a site) is assessed and prioritised for all new residential or business developments
W15	H1.28	Ensure convenient access for walking, cycling and public transport be required in the design and layout of new development
W16	H4.2	Improve pedestrian linkage between Harrow town centre and Harrow on the Hill

Future reference	Cycling	
C1	G3.11	Provide cycle training for adults and children and encourage the use of bicycles generally and in particular for journeys to school
C2	H2.3	The council will promote the recreational use of cycling – but give priority to its aim of increasing cycling as an alternative to car use.
C3	H2.11	Ensure cycle routes and facilities in the borough are appropriately located and regularly cleaned and maintained and that whenever possible, cycle tracks in parks are available at all hours
C4	H2.12	Encourage the use of bicycles generally and in particular for journeys to school.
C5	H2.13	Encourage employers to make provision for employees wishing to

Future reference	Cycling	
		cycle to a similar standard to that required from new development including the provision of “cycle pools”
C6	H2.14	Publish and distribute cycling leaflets and maps in areas of the borough identifying the locations of designated cycle routes, cycle parking facilities, barriers to use and main road crossings
C7	H2.15	The council will use its powers as local planning authority to make planning permission for future development conditional upon the availability of an appropriate level of pedal cycle parking and facilities such as showers and lockers and encourage provision of “cycle pools”
C8	H2.16	The council will use its powers and resources to provide secure and weather-protected cycle-parking at sites generating/attracting significant numbers of cycling trips – most particularly, at strategic interchanges and stations and at local shopping areas; and encourage other authorities with specific responsibilities within the Borough to do the same
C9	H2.17	Work with TfL to support the Mayor’s Cycle Superhighways schemes regarding improving access to the existing schemes or on the basis of bike hire space availability and work towards becoming a biking borough
C10	H2.18	The council will ensure the progressive achievement and maintenance of a high quality of cycle route provision, as well as clear continuity and consistency in design; and will ensure that, wherever practicable, provision is designed and implemented to cater for tricycle and trailer use
C11	H5.6	Provide effective alternatives to the car to encourage modal shift and increase provision for non-motorised modes of travel including cycling on all local access roads and treating walking as a priority travel mode, to be treated on a par with other means of transport
C12	G2.3	Liaise with Railtrack and Transport for London to address the lack of cycle parking on station land particularly at Harrow and Wealdstone and Harrow on the Hill stations.

Future reference	Car Use	
Cr1	H5.6	Provide effective alternatives to the car to encourage modal shift and increase provision for non-motorised modes of travel including cycling on all local access roads
Cr2	G1.4	Ensure that the vitality of town centres are supported through good transport access via all modes of transport prioritising sustainable modes of transport
Cr3	G2.10	Address congestion issues and maximise the efficiency and reliability of the operation of the road network through methods outlined further in Harrow’s Highway Network Management Plan.
Cr4	G3.5	Encourage safe and considerate driving, at appropriate speeds, as part of travel awareness and road safety education campaigns and review existing speed limit to ensure they are appropriate to the

Future reference	Car Use	
		location.
Cr5	G4.4	Prioritise in all schemes, the needs of those with mobility difficulties who need to drive to work, shops or other facilities
Cr6	G5.8	Pursue the viability of introducing a revised parking permit structure based on vehicle emissions
Cr7	H1.26	When considering housing developments the council will encourage developers to explore the potential for schemes to provide access to cars without individual ownership, possibly linked to inducements to use other modes

Future reference	Road and personal safety	
R1	H3.2	In the development of all corridors and neighbourhoods, the council will follow the detailed guidelines as outlined in the road safety plan.
R2	H3.1	Monitor motorcycle casualties and develop a localised response to address locations where accidents arise prioritising actions according to the severity of casualties
R3	H1.17	Maximise the effective use of camera enforcement where there are safety benefits to be gained from better enforcement.
R4	G3.1	Adopt the national and London casualty reduction targets and maintain an effective method of accident monitoring for the borough
R5	G3.2	Prepare a three year programme of 20 mph zones in the borough and incorporate these into neighbourhood schemes for TfL funding
R6	G3.3	Reduce the number of motorcycle casualties in the borough through educational campaigns
R7	G3.4	Prioritise schemes that maximise casualty reduction predictions and in particular the numbers killed and seriously injured per annum for the available finance
R8	G3.5	Encourage safe and considerate driving, at appropriate speeds, as part of travel awareness and road safety education campaigns and review existing speed limit to ensure they are appropriate to the location.
R9	G3.8	Work with schools and police to address perceptions of personal safety on buses
R10	G3.10	Provide road safety education events at schools throughout the borough
R11	G3.12	Ensure that the safety concerns of all road users are considered when considering any traffic scheme
R12	G3.14	Carry out safety audits of all new significant traffic and highway proposals.
R13	G3.15	Ensure speed activated signs are located at the most appropriate locations for reducing accidents
R14	G5.6	Work with schools to reduce the number of school trips made by car and liaise with schools regarding suggested highway works required in school locality

Future reference	Changing behaviour	
CB1	H5.1	Improve the Council travel plan to reduce the need for staff or visitors to travel by car and review options for securing parking and improved facilities for bicycles, electric vehicles, motorcycles, car club vehicles and car share vehicles
CB2	H2.5	Encourage and support schools, higher and further education establishments to review their own travel plans and to achieve TfL accredited status where appropriate
CB3	H5.4	Encourage the use of more environmentally friendly vehicles through the provision of reduced cost parking permits for appropriate vehicles and electric charging points
CB4	H2.8	Produce a rolling five year Travel Awareness Campaign Programme which includes customer engagement to target behaviour change
CB5	G1.3	Promote and support the development of travel plans in accordance with TfL guidelines either for individual organisations or on an area-wide basis as appropriate
CB6	G1.6	Improve the environment for pedestrians and cyclists in the whole borough and particularly within the Harrow Intensification Area.
CB7	G2.6	Promote sustainable and healthy travel choices through the use of school travel planning, travel awareness campaigns, cycle training and an improved walking environment
CB8	G5.1	Encourage modal shift towards more sustainable forms of transport
CB9	G5.5	Secure deliverable Travel Plans for major trip generating development
CB10	H1.27	Ensure that the policies in the LDF promote the provision of local facilities in accessible town centre locations
CB11	H1.28	Ensure convenient access for walking, cycling and public transport be required in the design and layout of new development
CB12	H1.29	The council will seek to ensure that new facilities to reduce car dependency e.g. real time public transport information and shopping lockers are placed in shopping centres
CB13	H1.30	The council will seek to ensure through its LDF that provision of local leisure facilities, particularly play and community-based, are close to residential areas, together with appropriate town centre venues
CB14	H1.31	Require developers to produce access plans for non-car users as well as car users for new leisure development (including redevelopment)

Future reference	Freight	
F1	H2.6	Ensure that freight movement, delivery and servicing within the borough is provided for in an environmentally sensitive, economic and efficient manner and ensuring appropriate routing avoiding residential areas
F2	H2.7	The council will support the continuation and effective enforcement of the London Lorry Ban

Future reference	Freight	
F3	H1.8	The council, while recognising that road transport will remain the basis for freight movement, delivery and servicing provision within Harrow, will promote and maintain local area lorry bans together with supporting initiatives to move freight by non-road transport modes
F4	H1.9	Work with GPS providers to ensure that freight routes are appropriately guided within the borough and avoid residential areas
F5	H1.11	Periodically review the provision in town centres and the Area of Intensification for all aspects of servicing, delivery, loading/unloading and freight movement, with particular regard to its impact on all other modes of transport, the local economy and the local environment
F6	H1.24	The council will seek to provide adequate delivery and servicing access to shops, businesses and residential premises and in particular to provide convenient on-street short-stay spaces for servicing / delivery vehicles
F7	G1.8	Continue to work with Freight Quality Partnership as a consultative forum for consideration of all matters of mutual interest
F8	G1.9	The council will produce and publish a map setting out key information in respect of restrictions on lorry movement within the Borough, in terms of: <ul style="list-style-type: none"> • Width, weight and length restrictions • Low bridges • Loading bans • Access restrictions, including pedestrian areas • Preferred routes for lorries
F9	H1.32	The council will require, as a condition of securing planning permission, that development proposals make proper off-street provision for servicing and loading/unloading within the development site, in such a way that all vehicles entering or leaving a site are enabled to do so in a forward gear
F10	H1.37	The council will support and seek, via the responsible regional/sub-regional authorities, appropriate sub-regional provision of break-bulk, consolidation, distribution and modal-transfer facilities for freight management, and appropriate and effective access to those facilities from the Borough

Future reference	Parking and Enforcement	
PE1	H5.3	Encourage the use of cleaner and more environmentally friendly vehicles through prioritising specific facilities for parking of “greener” vehicles at all council owned car parks, e.g. providing specific locations for parking providing charging points for electric vehicles
PE2	H1.12	Ensure that charges for parking support the economic vitality of all town centres
PE3	H4.3	In the development of parking schemes, the council will ensure convenient car parking for people with disabilities is considered
PE4	H1.16	Give high priority to the enforcement of parking and road traffic regulations, particularly to those affecting the safety of all road users,

Future reference	Parking and Enforcement	
		reliable operation of bus services and the prevention of traffic congestion
PE5	H1.17	Maximise the effective use of camera enforcement where there are safety benefits to be gained from better enforcement
PE6	H1.18	Promote and secure the adoption of consistent and complementary strategies at national, regional, London, sub-regional and neighbouring local authority levels and through the restraint-based car-parking standards
PE7	H1.19	In the development and operation of parking schemes and to ensure transparency , the council will follow the guidelines as outlined in the parking and enforcement plan which will be regularly reviewed and updated
PE8	H1.21	Support local businesses by giving priority to short stay on-street parking and by discouraging long-stay parking
PE9	H1.22	As reviews of CPZs take place, progressively enable the provision of business parking permits in CPZs for vehicles where permits are required as a major part of the operation of the business and where such journeys are not viable without such parking permits
PE10	H1.23	<p>Ensure that charges for off-street parking:</p> <ul style="list-style-type: none"> • Support the economic vitality of all town centres • Finance progressive improvements to the standards of the council owned car parks • Maintain price competitiveness with comparable privately operated car parks • Encourage short stay parking with rapid turnover of spaces and deter long-stay parking where appropriate • Reduce the demand on surrounding on-street pay and display parking • Are set with the aim of car parks being 85% full in peak periods • Are self financing
PE11	G1.7	Monitor and review the provision and operation CPZs in all areas of the Borough experiencing on-street parking stress and install new CPZs subject to, demand and consultation with the local community
PE12	G2.11	Where practicable, seek to secure consistent cross-boundary parking charges in conjunction with neighbouring authorities
PE13	G4.6	Where alternative options exist, prevent or deter parking on footways and verges ensuring that the safety and convenience of pedestrians, the visually impaired and disabled people is paramount
PE14	H1.25	Use Section 106 Planning Agreements to secure developer contributions towards the costs of meeting and ameliorating the travel demand generated by development through improvement to public transport, walking and cycling, installing parking controls and, where necessary, creating regulated and controlled public car-parks

Future reference	Parking and Enforcement
PE15	<p>H1.33 In considering planning applications for non-residential development the council will have regard to the specific characteristics of the development including provision made for:</p> <ul style="list-style-type: none"> • Operational parking and servicing needs • Convenient car-parking for people with disabilities • Car parking related to shift and unsociable hours working • Convenient and secure parking for bicycles (and provision of showers and changing facilities for cyclists) • Needs of parking for motorcyclists
PE16	<p>H1.34 Where accessibility by non-car modes is particularly good or can be made so, the council will actively seek to secure lower levels of car parking provision or even zero provision in developments, and require the completion of a binding agreement to ensure that any measures necessary to improve accessibility by non-car modes are secured</p>
PE17	<p>H1.38 The council will work with the Mayor, the GLA and the Government to pursue the progressive removal / control of “free” parking – through planning agreements (new development), through voluntary initiatives (retail partnerships) or by extending the principle of charging for car parking spaces</p>

Future reference	Highway Management
H1	<p>H1.16 Give high priority to the enforcement of parking and road traffic regulations, particularly to those affecting the safety of all road users, reliable operation of bus services and the prevention of traffic congestion</p>
H2	<p>G2.10 Address congestion and maximise the efficiency and reliability of the operation of the road network through methods outlined further in Harrow’s Highway Network Management Plan</p>
H3	<p>G2.5 Improve on the condition of Harrow roads by continuing to prioritise road maintenance in Harrow’s capital and revenue budgets</p>
H4	<p>G3.7 Reduce traffic volumes on local roads through traffic management techniques and where possible by diverting traffic to main arterial/distributor roads.</p>
H5	<p>G4.5 When financially possible, continue to support of the expansion of the Harrow Shopmobility services and their opening hours</p>
H6	<p>G4.7 Develop a 3 year rolling strategic programme for corridors and neighbourhood scheme improvements</p>
H7	<p>G4.8 Develop a 3 year rolling major schemes programme that considers area improvements on a holistic basis</p>
H8	<p>H2.29 Ensure that all schemes implemented follow the Harrow street furniture design guide ensuring best practice for materials and reducing street clutter</p>

Future reference	New policies regarding Intensification Area	
IA1	H1.10	Seek to contribute to the delivery of an Area Action Plan for the Harrow and Wealdstone intensification area
IA2	G5.9	Seek opportunities for new tree planting in the Intensification Area.
IA3	H1.14	Prioritise the implementation of neighbourhood , corridor and area based schemes which most benefit connectivity in the Intensification Area
IA4	H1.15	Review the parking regulations in the Intensification Area to ensure that the needs of planned growth are appropriately addressed
IA5	G5.2	Promote mixed use development in growth locations to reduce the need to use a vehicle for trips between residential, retail, leisure and employment areas

Appendix C: Glossary of terms used

DfT	Department for Transport
DTO	Directorate of Traffic Operations
GLA	Greater London Authority
HAMP	Harrow Asset Management Plan
HS2	High Speed 2
IMD	Index of Multiple Deprivation
KSI	Killed or Seriously Injured
LAA	Local Area Agreement
LDA	London Development Agency
LDF	Local Development Framework
LEGGI	London Energy and Greenhouse Gas Emissions
LIP	Local Implementation Plan
LTCC	London Traffic Control System
MTS	Mayor's Transport Strategy
NI	National Indicator
ROWIP	Rights of Way Improvement Plan
SCS	Sustainable Community Strategy
SEA	Strategic Environmental Assessment
TEEM	Transport and Enhanced Emissions Model
TfL	Transport for London
TLRN	Transport for London Road Network
TMA	Traffic Management Act