

## APPENDIX A

# HARROW COUNCIL ROAD SAFETY PLAN

Last updated January 2012



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## **1. INTRODUCTION**

### **1.1 Statutory Framework**

The Road Traffic Act 1988, Section 39, gave local authorities responsibility for all roads outside the motorway and trunk road system. This was superseded by the Greater London Authority Act 1999, which transferred responsibility for the Greater London Authority roads to Transport for London but left local authorities responsible for road safety on remaining roads within the local authority.

Local authorities are required by statute (Road Traffic Act 1988) to:

- Carry out a programme of measures designed to promote road safety on existing roads and in the construction of new roads.
- Undertake studies of personal injury accidents.
- Take appropriate measures to prevent such accidents.
- Provide road safety advice, information and practical training for road users.

The Council has a statutory duty to maintain the safe, convenient and free flow of pedestrian and vehicle traffic except where lawful restriction of speed direction or movement of traffic is imposed by a legal order. The Council has powers as a highway authority under the Highways Act 1980 to construct, manage, maintain and improve highways. It also has powers under the Road Traffic Act 1991 to enforce parking restrictions in order to promote road safety.

The Road Traffic Regulation Act 1984 places a duty on local authorities to secure the expeditious, convenient and safe movement of vehicular and other traffic, including pedestrians and cyclists, and the provision of suitable and adequate parking facilities on and off the highway and to have particular regard to:

- Reasonable access to premises;
- The effect on amenities; and
- Passage of public service vehicles and the safety of passengers.

### **1.2 Policy Background**

Until 2011, National Governments and the Mayor of London had agreed and set road safety targets which were reported locally and nationally. This has now changed and a localism agenda has replaced the national target setting and the national road safety policy. This is intended to allow local authorities the freedom to address local road safety in the way that local residents and politicians deemed best fit.

In May 2011, the Government published its Strategic Framework for Road Safety. This moved away from national casualty targets towards monitoring road safety indicators. This strategic framework also sets out a wide range of measures to tackle careless and dangerous driving – including a new fixed penalty notice for careless driving and tougher action against drink and drug drivers. Also included is an Outcomes Framework designed to help improving road safety and decreasing the number of fatalities and seriously injured casualties on the roads.

The Government believes that road deaths could fall by around 37% to 1,770 by 2020 and road casualties could fall by 57% to below 10,000 in the same time period. The framework makes it clear that this is not a government target but is a realistic aspiration. The national reductions in deaths and casualties on the roads are largely expected to be achieved by bringing the worst performing local authorities up to the standards of the best performing authorities. As Harrow's

road safety is one of the best in the country it is not realistic that this sort of drop in fatalities or casualties on the roads will be achieved.

Other key policy influences on road safety in the borough are:

- The Mayor's Transport Strategy which states that reducing the number of people killed or seriously injured in road traffic is a key goal for the Mayor; and
- Harrow Transport Local Implementation Plan 2011/12 -2013/14 which includes road safety targets for the borough which are agreed by the Mayor of London.

### **1.3 Overview of Casualty Reduction in Harrow**

Harrow has a strong tradition of promoting and prioritising road safety. This is reflected in the Council's personal injury accident record, which consistently shows that the number of casualties in Harrow each year is amongst the lowest of all the London Boroughs. In addition, Harrow has one of the lowest accident rate per head of population for all the London boroughs. See Figure 1-1 which shows the number of road accidents per 1,000 population.

This Road Safety Plan sets out ways in which the Council intends to contribute towards the reduction of road accident casualties. The Plan sets out the education, training, engineering and enforcement programmes, which seek to ensure that roads are managed as safely as possible and in accordance with the statutory requirements.

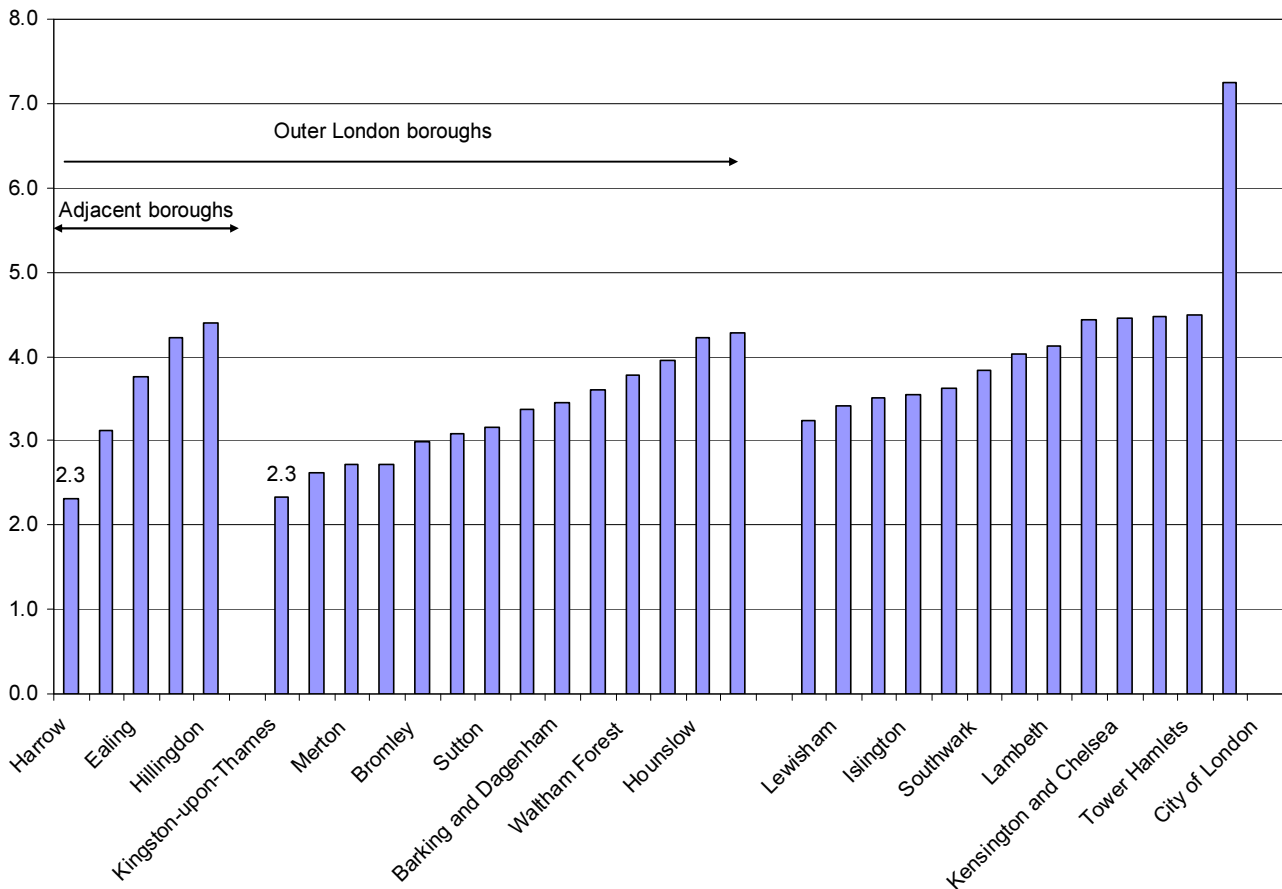
The Council can only achieve a certain amount on its own and anyone involved in transport has a role to play in improving road safety. The Government, Transport for London, the Council, the Police, car manufacturers, all have a role in creating a safer environment for road users. Technology also plays an increasingly important part in the general enforcement of traffic regulations which also contributes towards improving road safety.

The Council's efforts in recent years resulted in Harrow achieving the national accident reduction target set by the previous government for both killed or seriously injured and for slight injuries. This road safety plan sets out Harrow's plans in ensuring that casualty reduction in Harrow continues to be reduced and shows the Council's resolve in achieving road safety targets.

The main factor in most accidents is the involvement of the car. In Harrow, car occupant casualties made up for 63% of all casualties in 2010. However, it should be noted that the borough has one of the highest number of households who own a car, and is among the highest of households that own 2 or more cars, yet still has one of the lowest casualty rates in London.

Figure 1-1

Number of road casualties per thousand population (2007)



## 2. HARROW POLICIES

Harrow's Transport Local Implementation Plan 2011/12 - 2013/14 contains the strategic policy actions that influence road safety within the borough. These policy actions have been developed and revised following wide scale public consultation. These policies are as follows:

- R1 In the development of all corridors and neighbourhoods, the council will follow the detailed guidelines as outlined in the road safety plan.
- R2 Monitor motorcycle casualties and develop a localised response to address locations where accidents arise prioritising actions according to the severity of casualties
- R3 Maximise the effective use of camera enforcement where there are safety benefits to be gained from better enforcement.
- R4 Adopt the national and London casualty reduction targets and maintain an effective method of accident monitoring for the borough
- R5 Prepare a three year programme of 20 mph zones in the borough and incorporate these into neighbourhood schemes for TfL funding
- R6 Reduce the number of motorcycle casualties in the borough through educational campaigns
- R7 Prioritise schemes that maximise casualty reduction predictions and in particular the numbers killed or seriously injured per annum for the available finance
- R8 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 Work with schools and police to address perceptions of personal safety on buses
- R10 Provide road safety education events at schools throughout the borough
- R11 Ensure that the safety concerns of all road users are considered when considering any traffic scheme

- R12 Carry out safety audits of all new significant traffic and highway proposals.
- R13 Ensure speed activated signs are located at the most appropriate locations for reducing accidents
- R14 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

Updated information similar to the contents of the Appendices to this report will be provided on Harrow's website to ensure that, whenever possible, the latest information is made available for public inspection.

### 3. CASUALTY MONITORING AND TARGETS

This section deals with casualty monitoring and targets nationally, regionally and locally. Policies from each of these levels of government impact on the work carried out in Harrow.

#### 3.1 National

Following the publication by the Government of its Strategic Framework for Road Safety in May 2011, there has been a clear move away from national casualty targets towards local decision making. However there are still 6 key indicators which will be measured at the national level. These are:

1. Number of road deaths (and rate per billion vehicle miles)
2. Rate of motorcyclist deaths per billion vehicle miles
3. Rate of car occupant deaths per billion vehicle miles
4. Rate of pedal cyclist deaths per billion vehicle miles
5. Rate of pedestrian deaths per billion miles walked
6. Number of deaths resulting from collisions involving drivers under 25

In order to see the impact of Harrow's casualties on London as a whole, the trend for the above groups are provided below but not in relation to miles travelled as this is not available at a borough level. Because the numbers involved at the local level are so small, trends for this data cannot be assessed. Information related to these indicators is as follows:

	2005-2009 average	2008	2009	2010
Numbers killed	2.5	0	2	2
Number of motorcyclist killed	0.6	0	0	1
Number of car occupants killed	0.4	0	1	0
Number of pedal cyclist killed	0.2	0	0	1
Number of pedestrians killed	1	0	2	0
Number of deaths resulting from collisions involving drivers under 25	0.6	0	1	1

As well as the key indicators referred to above, the Government's Strategic Framework for Road Safety indicates that the Government will also be considering a comprehensive list of indicators relating to key themes. Themes include fatalities and serious injuries for various age groups, car occupants, HGV and LGV involvement, motorcyclists, pedestrians and disadvantaged groups.

#### 3.2 London

In London, a new Road Safety Plan to 2020 is being prepared by Transport for London for consultation in 2011/12. Once this has been prepared, input from that plan will be incorporated into Harrow's road safety plan.

### 3.3 Harrow

For many years, Harrow has achieved lower accidents than nearly all other London Boroughs. For this reason achieving even further reductions is considerably more challenging.

In the Government's Strategic Framework for Road Safety, the Government proposes that the following key indicators are measured locally:

1. Number of killed or seriously injured casualties
2. Rate of killed or seriously injured casualties per million people
3. Rate of killed or seriously injured casualties per billion vehicle miles

To show the impact of the number of those killed or seriously injured in Harrow, for national data comparisons, is:

	2005-2009 average	2008	2009	2010	Change in 2010 from 2005-2009 average
Number killed or seriously injured casualties	58	52	49	39	-33%

Harrow's Transport Local Implementation Plan sets targets for road safety that have been developed and agreed with the Mayor of London. These targets are as follows:

Indicator	Target for 2012/14	Long Term Target (2020)	Comment
The number of killed or seriously injured (rolling 3 year average)	42	40	The long term target considers that cycling in the borough will increase significantly and because cyclists are vulnerable road users the associated road accidents will also increase
Total casualties (rolling 3 year average)	468	431	This long term target is achievable
Number of motorcycle casualties	40	40	It is likely that over the longer term the numbers using motorcycling will significantly increase and Harrow aims for there to be no associated increase in motorcycle casualties.

Section 4 shows Harrow's performance against the agreed targets. Section 4 shows trends for some of the other subgroups of particular importance to Harrow.

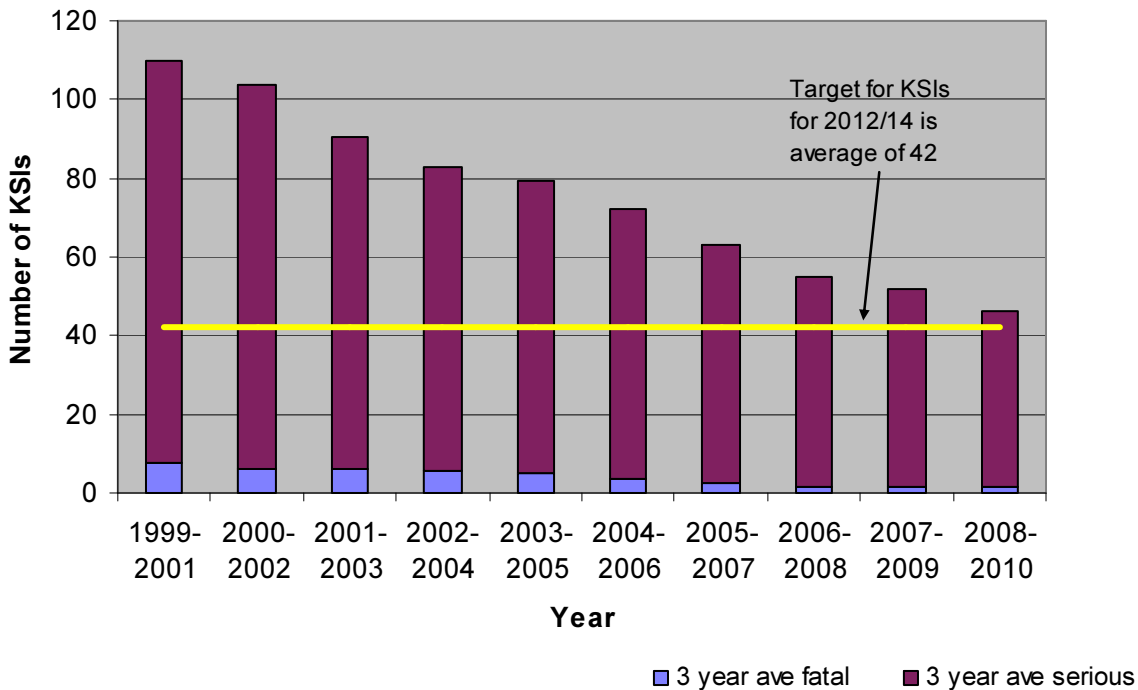
## 4. PERFORMANCE AGAINST LIP CASUALTY TARGETS TO DATE

This section deals with the agreed road safety targets Harrow is working towards.

### 4.1 Killed and seriously injured

This is a national indicator and a locally agreed target.

### 3 year rolling averages for Harrow killed and seriously injured

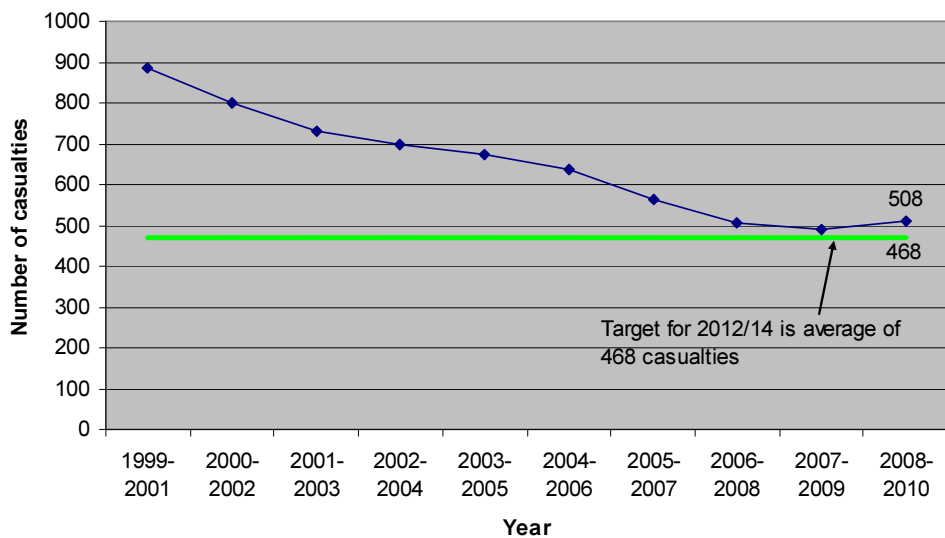


This target has not yet been met though additional road safety measures being introduced will certainly help to achieve the target and the borough is on course to achieve this target.

### 4.2 Total casualties

This is a locally agreed indicator and target and is particularly important for considering local clusters and trends because there are so few people killed or seriously injured in the borough.

#### 3 year rolling averages for road traffic casualties

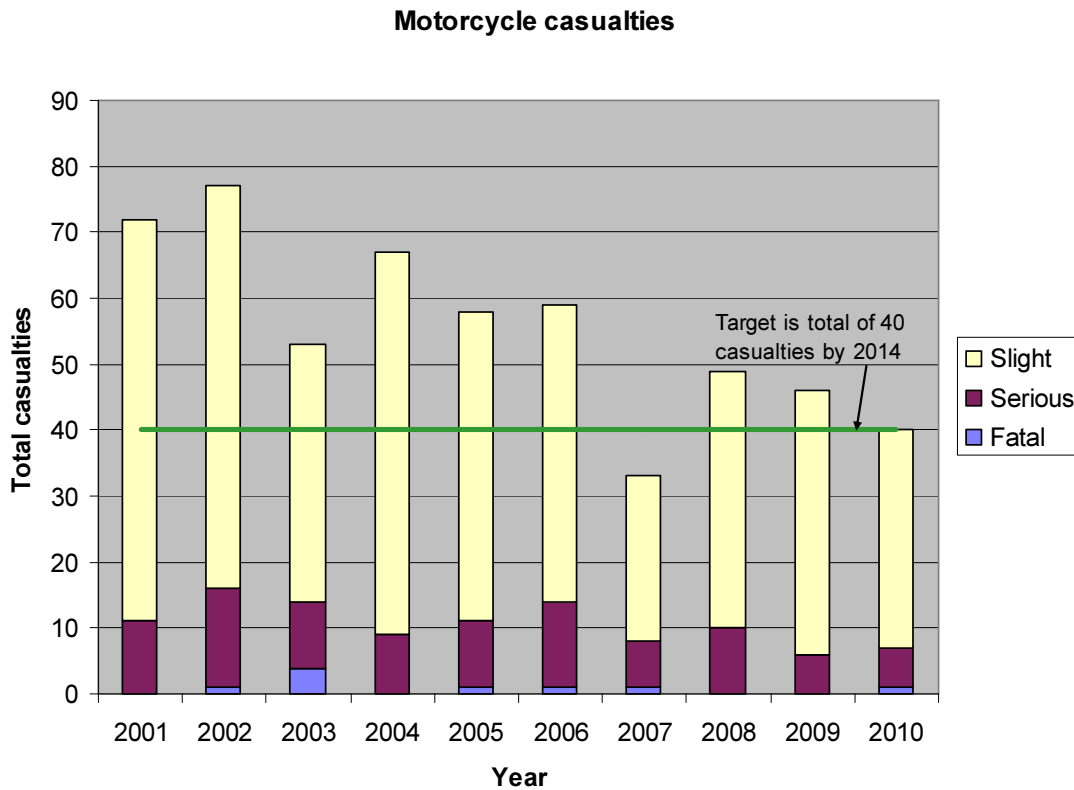


This target was met in 2008 but not for the rolling average for 3 years. Harrow is concerned about this recent rise in road casualties and through measures outlined in this plan still considers the target to be achievable. In addition, the borough is committed to reducing casualties to below 431 in the longer term.



### 4.3 Motorcycle casualties

This is a locally agreed target and was selected because the borough is particularly concerned about the level of motorcycle casualties. The increase in the use of motorcycles and scooters and their popularity as a means of relatively cheap independent transport has led to an increase in casualty numbers over the last few years. In Harrow motorbikes and scooters make up about 1% of all traffic but casualties associated with them account for just over 10%.



This target was met in 2010. Reducing motorcycle casualties in the borough is one of Harrow transport’s primary objectives and additional campaigns will be introduced to address motorcycle safety.

### 5. TRENDS IN CASUALTIES

There are many subgroups of people that contribute to the overall casualty data that need to be considered in order to make sure that Harrow is taking the right steps in trying to reduce the number of casualties.

Subgroups where trends in casualties are monitored are shown below along with the reason for these trends being monitored.

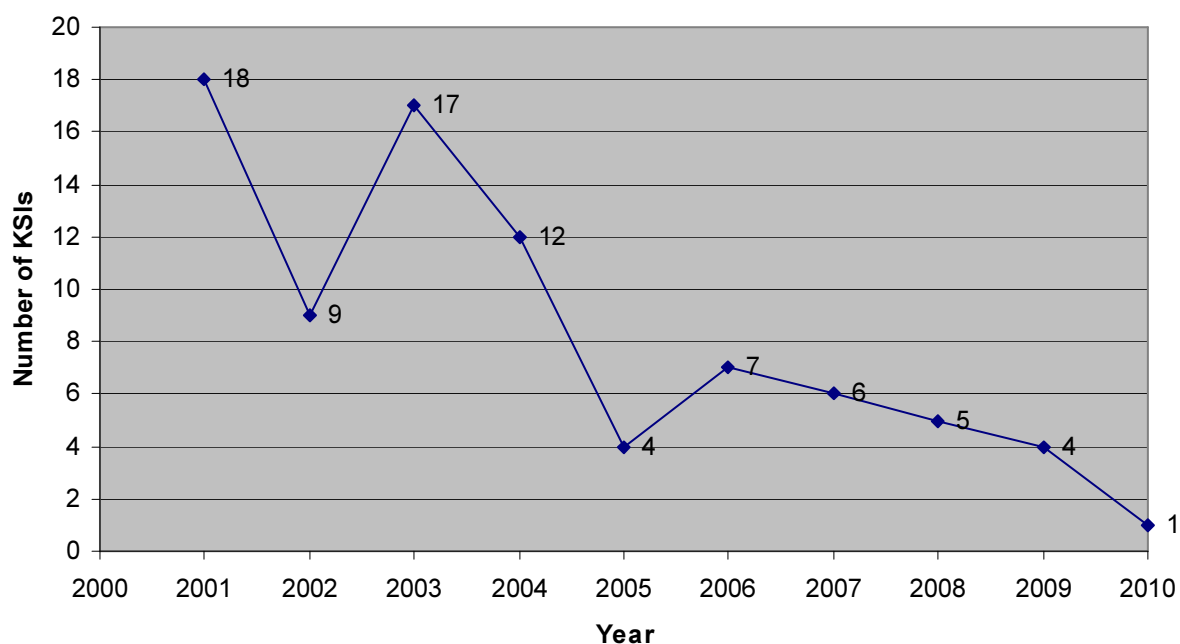
Harrow groups and subgroups	Reason
Killed or seriously injured young people	The borough is continually trying to increase the number of people walking and cycling to school, it is important to be sure that there is no knock on impact of an increase in associated young people killed or seriously injured.
Young pedestrians killed or seriously injured	As above
Young pedestrian casualties	As above

Young cyclist casualties	The borough is making considerable efforts to increase the number of people cycling. Young people will be a key group that will be targeted to achieve an increase. Therefore it is important that if there is any increase in cycle accidents it is immediately addressed.
Pedestrians killed or seriously injured	Pedestrians are a particularly vulnerable user group and for this reason, the borough considers it important to closely monitor these accidents.
Cyclists killed or seriously injured	As above and also as an increase in those cycling is anticipated it is important that this group is particularly closely monitored.

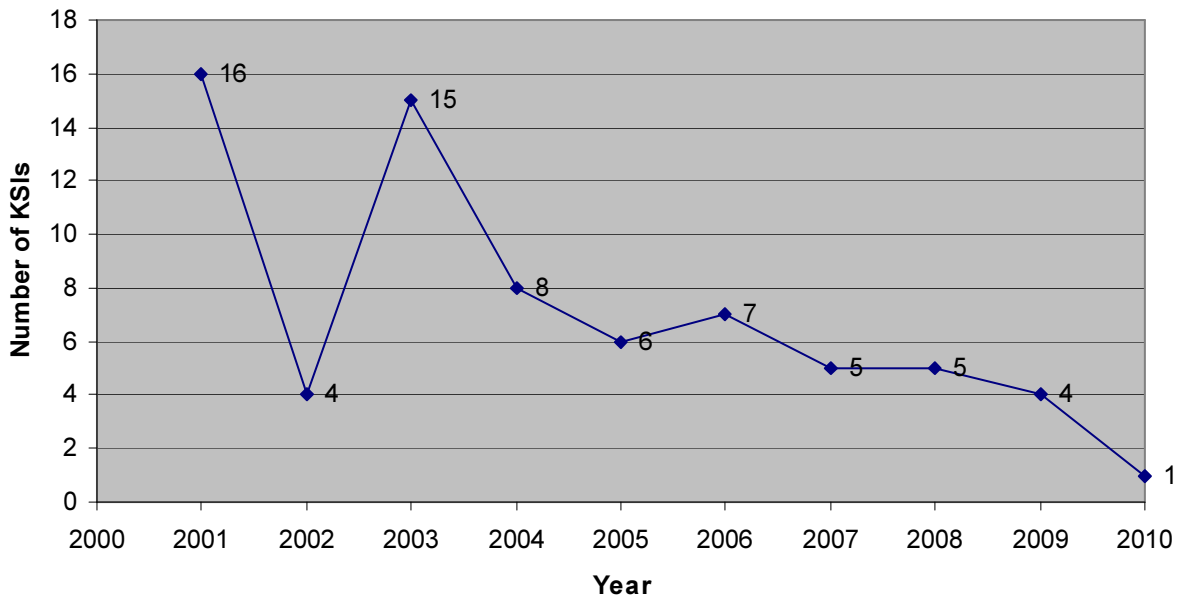
## 5.1 Children and young people

It is a borough transport objective to encourage children to walk and cycle to school. This is for personal health reasons and is a good way to reduce child obesity, but reducing the school run would also reduce the associated local congestion and improve the local air quality. The borough has been successful in doing this and reducing the numbers going to school by car. However it is a careful balance to ensure that children and young people while walking and cycling are safe and that the consequence is not an increase in casualties.

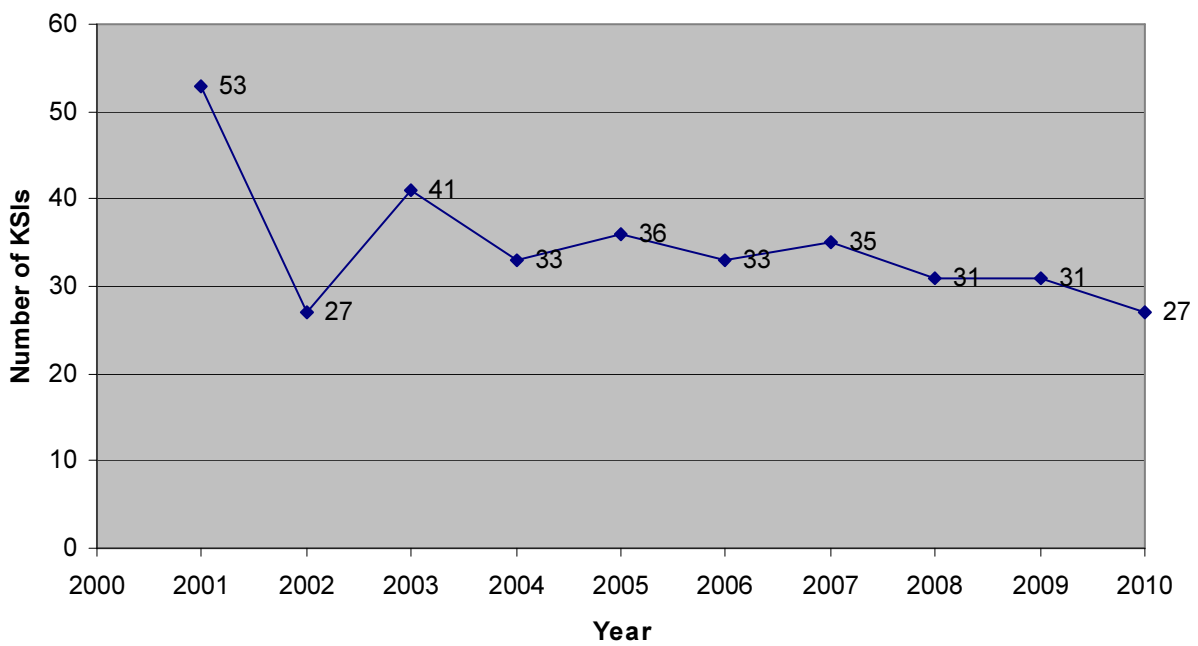
### Killed and seriously injured children and young people (0-17)



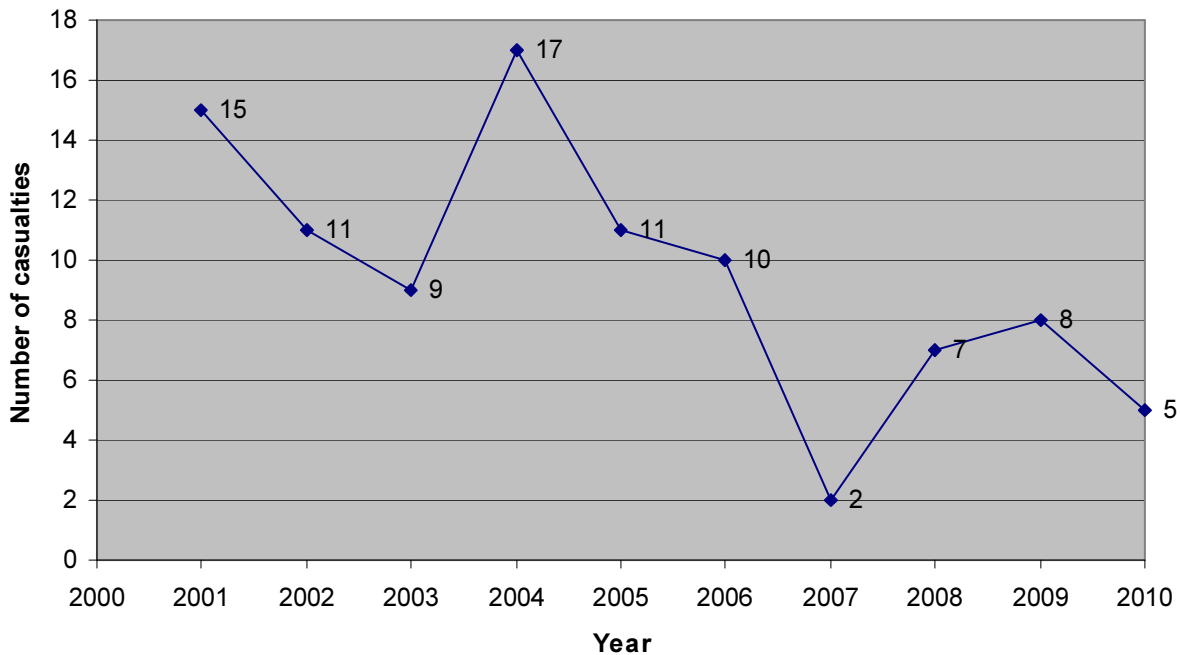
### Pedestrian Killed or Seriously Injured children and young people (0-17 yrs)



### Pedestrian casualties for children and young people (0-17 yrs)



### Cyclists casualties children and young people (0-17 yrs)

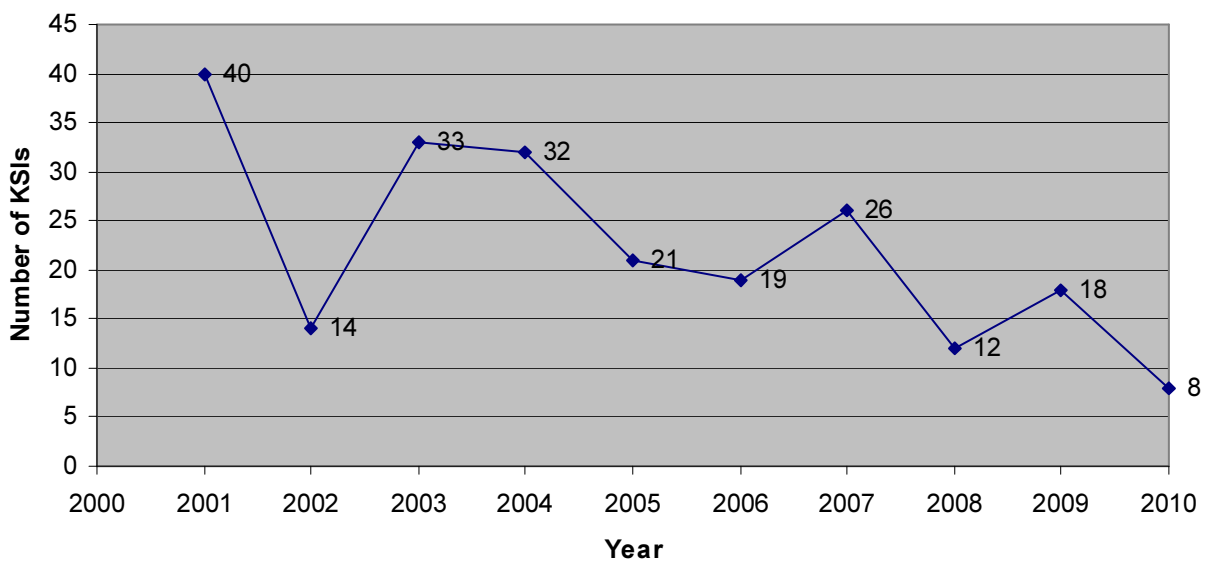


### 5.2 Pedestrians and cyclists

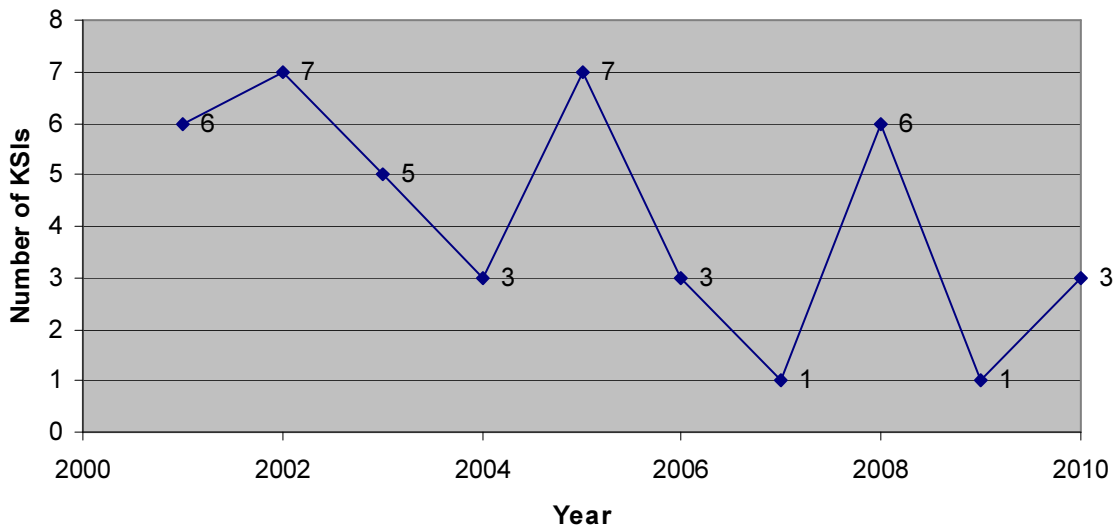
Pedestrians and cyclists are particularly vulnerable on the roads and therefore Harrow considers trends in accidents for these groups particularly carefully. A seemingly minor accident involving a car could cause a serious injury when a pedestrian or cyclist is involved.

Although the number of cyclists killed or seriously injured on Harrow roads is low, the borough is anticipating a high increase in the numbers cycling over the following few years and is aware of the need to ensure that maximum attention is given to ensuring an increase in accidents does not occur.

### Pedestrians Killed or Seriously Injured



## Killed or seriously injured cyclists



## 6. EDUCATION, ENGINEERING AND ENFORCEMENT

The major causes of accidents in Harrow are:

- Speed
- Careless driving (including driver distractions such as mobile phones and disruptive passengers)
- Dangerous driving (including driving under the influence of alcohol or drugs)

To address these problems, Harrow uses the following tools:

- Education through public information (campaigns and leafleting on road safety issues) and providing public information direct to school age children
- Engineering through highway management
- Enforcement through parking attendants and speed and red light cameras

Initiatives such as introducing 20 mph Zones, School Travel Plans, Local Safety Schemes and major scheme works all aim to reduce casualties. In particular, Harrow's 20mph programme focuses on areas surrounding local schools.

Harrow has adopted a comprehensive programme of Education, Training, Engineering and Enforcement aimed at reaching Harrow's targets for casualty reduction and further reducing accidents.

### 6.1 Education and Training

In order to ensure that education is targeted at the appropriate groups it is necessary first to know who is involved in accidents in Harrow and what type of vehicles are involved.

Accident analysis carried out by TfL show that in London boys aged 11-14 are most at risk from being hit by a vehicle when crossing roads. Children from low income and ethnic minority backgrounds are also particularly vulnerable. Approximately a quarter of all teenage pedestrian casualties occur on the way to or from school. Peer group pressure, mobile phones, texting and

the use of personal stereos can easily distract young road users. Other activities including ball games, rollerblading and skateboarding on the street can also lead to serious accidents involving teenagers and traffic.

Recent research by TfL also influences the way road safety education is implemented in the borough. In particular they have recently conducted road safety research projects into:

- Surveying attitudes on seatbelt wearing and use of hand-held mobile phones; and
- Quantifying ethnic inequalities in road traffic injury amongst London's black and Asian minority ethnic groups.

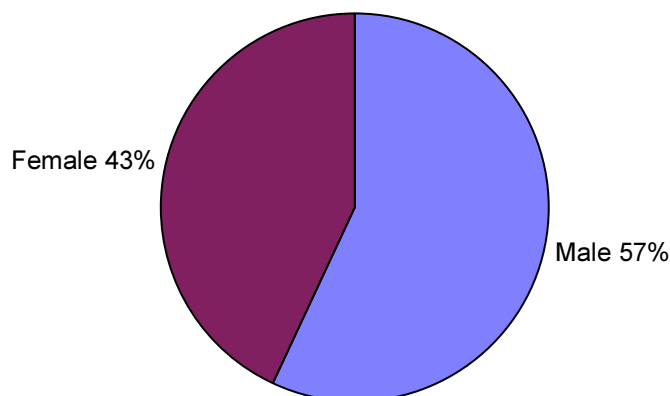
The following charts show the types of vehicles involved in all accidents in Harrow in 2010, the age group of those involved, the gender of those killed or seriously injured and also the ethnicity of child pedestrian casualties. These charts show the need to target education and training particularly towards young people, pedestrians and more particularly child pedestrians from ethnic minorities.

Harrow has a larger proportion of ethnic population compared with Greater London and this is reflected in the Borough's higher ethnic casualty figures. This can only be reduced by further education and publicity. It is intended to pursue this avenue by working with local community groups and schools, ensuring that education measures in appropriate languages are understood by their target groups, and that the information is effectively distributed amongst these groups. In addition, Harrow monitors the ethnic backgrounds of applicants for child cycle training to ensure that ethnic minority children do receive cycle training.

#### *Gender*

Gender is the most significant factor in casualties and in the numbers killed or seriously injured as shown by the following graph:

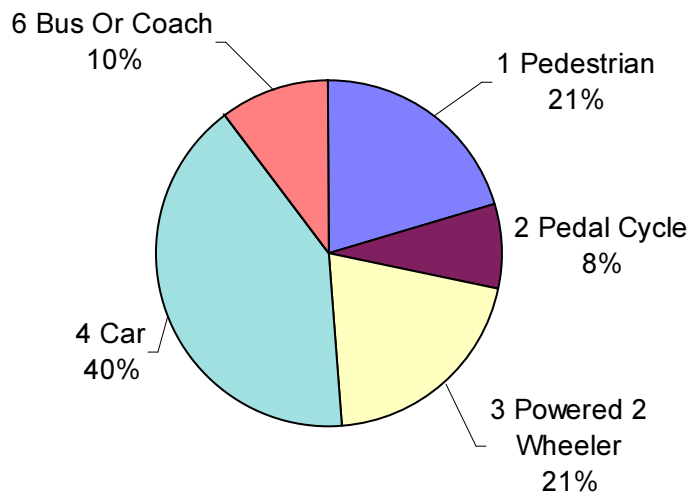
**2010 gender breakdown of all casualties**



#### *Road user class*

When considering the volume of all road user types, the chart below shows the extreme vulnerability of pedestrians, cyclists and motorcyclists on the roads.

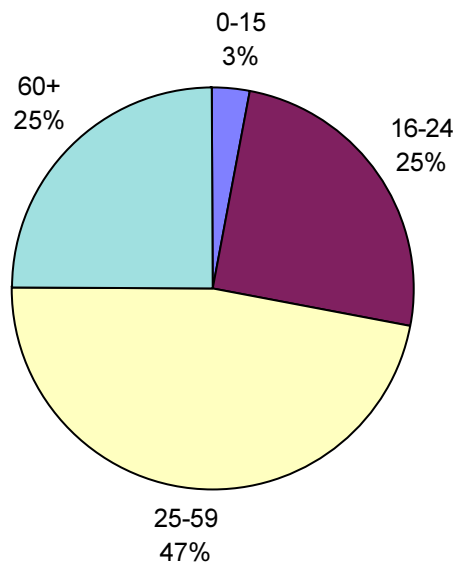
### Killed and seriously injured by road user class 2010



### Age

Considering that 16-24 year olds do not make up 25% of the population, the following chart is very revealing as to how we need to direct our educational and promotional resources.

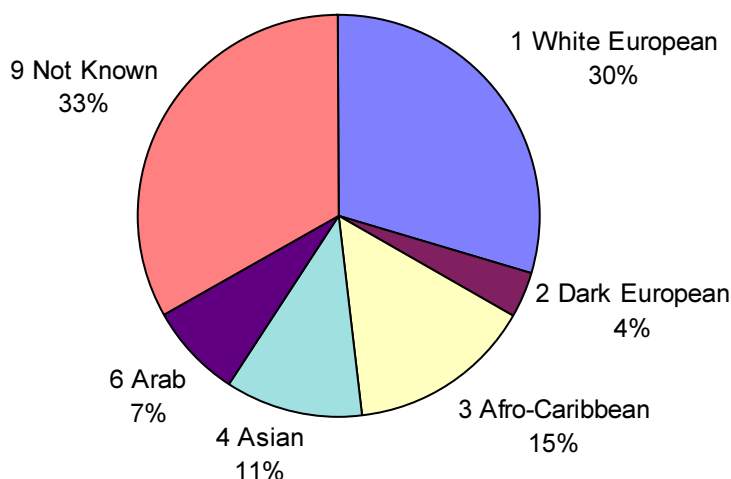
### Killed and seriously injured by age group, 2010



### *Ethnicity*

In 2010, 37% of child pedestrian casualties in Harrow were from ethnic minorities. This compares with 48% in 2007 and 57% in 2006. In the general population in Harrow, around 41% are from ethnic minorities. This is monitored because there has been national evidence showing that black and ethnic minorities are higher represented in child pedestrians than any other groups.

### **Child pedestrian casualties by ethnic group, 2010**



### **6.1.1 Targets**

Harrow has set the following target for school road safety and cycle training.

#### *Education and training target*

The Council has a rolling programme for Road Safety Officers to visit all first and middle schools at least once a year subject to staff resources. During this visit all pupils receive road safety talks relevant to their age group. This ensures at least 80% of all primary school pupils aged 5 and over receiving road safety advice during the year.

*Targets and performance for cycle training are:*

Target	Performance
5% of 0-16 year old population to receive cycle training per annum.	2.5%
20 Cycle courses to be run per annum	16

These targets are reviewed annually.

### **6.1.2 Road Safety Resources**

Harrow employs a senior Road Safety Officer and a Road Safety officer in the Traffic and Road Safety team and a school travel advisor in the transport policy section. The road safety officers



are responsible for developing education, training and publicity generally and for schools. The school travel advisor assists the schools in the development of School Travel Plans. Further information on School Travel Plans is provided in Harrow's School Travel Plan Strategy. School crossing patrols are managed and employed in the parking enforcement section of the Council.

### **6.1.3 Road Safety Education Activities**

The following is a summary of all road safety activities undertaken by Harrow's road safety officers:

#### **6.1.3.1 Pre School road users**

Through links with Transport for London and the local Primary Care Trust, invitations to join the Children's Traffic Club are sent to parents of children just before their 3<sup>rd</sup> birthday. Following registration, a series of six workbooks and other promotional materials are sent out to the children at regular intervals to assist parents in giving their children basic road safety instruction.

Additional materials are provided to playgroup and nursery leaders to compliment the Traffic Club information and to promote membership of the club to as many parents as possible.

Visits to nurseries and playgroups are made by road safety officers on request from club leaders but are limited by staff resources. The intention is for Road Safety Officers to make contact with each playgroup on an annual basis to promote and discuss road safety issues.

Materials (or road-safety related play equipment such as jigsaws, traffic lights and dressing up clothes) are made available by the Council to pre-school organisations to borrow in conjunction with specific projects or visits.

Where appropriate, Department for Transport road safety leaflets translated into Bengali, Urdu, Punjabi and Gujarati will be distributed at these meetings. Ongoing discussions with playgroup and nursery group staff will be made to see whether other translations are required and would be of value.

#### **6.1.3.2 Schools**

The Council is working with schools to provide practical child pedestrian training methods and assess their viability in terms of school curriculum time and the willingness of school staff and parents to assist in the training. Every school also receives a visit from the Council's road safety team where presentations are given according to age group. This covers all aspects of road safety from pedestrian safety, in car safety, cycling and use of public transport.

Issues discussed in visits are:

- Walking – Walking buses, crossing roads safely and the importance of distractions as the major causes of accidents for school age children.
- In car safety – use of child and booster seats (seat belts)
- Cycling – The benefits of cycling and training opportunities available in the school holidays and also with school groups in curriculum time is being promoted.

Hard hitting presentations are also now provided to all High Schools in the Borough in an attempt to bring down the child pedestrian accidents associated with the journey to school. Age specific presentations target all year groups and are supported with additional publicity and promotional material.

Pre driver courses are also provided for 6th Form students specifically focussing on peer pressure, drink, drugs and speeding.

School crossing patrols are provided to schools in the borough where they can be of most assistance. This support is limited by the number of patrols available but the support offered is prioritised on achievable safety benefits.

#### **6.1.3.3 Walking Buses**

A walking bus is an organised group of children who walk to school together accompanied by designated adults who are usually parents of some of the children walking or school teachers. Several schools have shown interest in supporting this low cost approach to travel planning. At present there are seven walking bus routes running and more are in the process of starting up. Road Safety Officers carry out safety audits on proposed routes and ensure that safety training is given to supervisors and participants. Publicity for the schemes is also being included in school newsletters and information leaflets are being made available to playgroups, nurseries and schools for distribution to the new intake of pupils. These measures do rely on the co-operation of parents, which can sometimes be difficult to sustain.

#### **6.1.3.4 Theatre in Education**

A range of plays will be commissioned and offered to schools on a regular basis and aimed at various age groups. The plays include themes relevant to junior and high schools. The plays encourage the children to interact with the actors to reinforce the road safety messages.

#### **6.1.3.5 Age specific talks**

The “Junior Citizens Scheme” – This initiative involves around 2500 year 6 pupils over a three week period, usually in June, and involves the pupils in a range of personal safety activities. A Road Safety role play focussing on distractions for drivers and pedestrians sends out an important message to the children. Information leaflets and publicity materials are handed out to all participants. The scheme is run in partnership with other agencies such as Police, Fire, transport operators and other Council departments covering drugs, racial problems and bullying

#### **6.1.3.6 School Parking Problems**

Road Safety officers and the School Travel Advisor are working with Parking Enforcement officers and local Police to try and educate drivers who persist in causing problems outside the school gates and to local residents near schools. Publicity information will be included as a regular feature in newsletters issued to pupils and parents and as a review item in School Travel Plans. A new presentation has also been designed to educate children and their parents on the dangers that are caused by selfish and dangerous parking. Posters and other promotional materials supporting local, London and national campaigns will also be issued as suitable materials become available. Investigations into the use of CCTV are ongoing with the Parking and Enforcement team.

#### **6.1.3.7 Cycle Training and promotion**

Bikeability levels 1,2 and 3 are offered to all schools in the Borough. Training sessions are offered during term time and all the school half term and holiday periods, usually from February to the end of October.

There are 3 levels of Bikeability Cycle training:

Level 1 – Beginners, balance and control of their cycle – pupils aged 8/9 years

Level 2 – Comparable to “Cycle Proficiency” that now includes instruction on local roads

Level 3 – Where pupils are given the opportunity to develop their skills by planning routes and using main road and routes

The Cycle training is now mainly provided by outside cycle trainers with Road Safety Officers providing promotion and support to the courses at schools

During programmed road safety visits, the promotion of cycle training and cycling to school will be used to the appropriate age groups. In order to promote cycling to school, secure cycle parking provision will be surveyed and where possible supplied to schools through funding from the development of School Travel and Safer Routes to School initiatives.

#### **6.1.3.8 Youth Groups & Young Adults**

Meetings will be held with senior staff at Harrow colleges to identify potential areas of work where the students will benefit and be able to use their skills in assisting in development and promotional work. Activities could include theatre performances, computer games, displays and publicity materials.

The use of moped and motorcycles (powered two wheelers) by teenage riders is causing concern in the borough. High profile motorcycle safety campaigns focussing on young riders have been run during the summer months and will continue to be run to address the high number of motorcycle casualties.

#### **6.1.3.9 Ethnic minorities**

The Road Safety Officers will distribute the Department for Transport road safety leaflets, where available in Bengali, Urdu, Punjabi and Gujarati. The DfT leaflets provide background road safety information to parents of children aged up to 6 years and are supported by nursery and playgroup staff. School open days and road safety officer participation in community forums are also used to educate minority groups on all aspects of road safety.

#### **6.1.3.10 Adult driving skills**

The overwhelming majority of people involved in road accidents are car users. The Road Safety Team will not only promote pre-driver education in schools, it will also encourage courses for newly qualified drivers and advanced driving for more experienced drivers, such as the “Pass Plus” scheme. This is where new drivers take further instruction from qualified driving instructors covering topics not included in basic driving test courses, such as motorway driving, driving at night and in poor weather. Part funding is currently being provided by Transport for London for young drivers to take advantage of this additional training, which can also provide other benefits in reducing insurance costs. For moped and motorcycle riders support for London wide schemes such as “BikeSafe” and “Scooter Safe” will be promoted through motorcycle dealers and at Sixth Form Colleges.

The Council will support publicity campaigns with a range of information leaflets which will be made available for either individual use or for larger scale distribution.

Subject to future funding leaflets will be distributed on issues relating to: speed, drink, drugs, vehicle safety, holidays, tiredness, women drivers’ safety, mobile phones, advanced driving and in-car safety and emergency procedures.

#### **6.1.3.11 Road Safety Campaigns**

The Harrow Road Safety Team is committed to making the roads of Harrow safer for everybody. Harrow is already one of the safest London boroughs as far as road casualties are concerned but there is always room for improvement. Throughout the year, several road safety campaigns take place aimed at a variety of different groups.

Harrow campaigns aimed at improving road safety for motorcyclists include the following:

- Large street side banners displayed along roads where there is a history of motorbike accidents run in conjunction with the police providing motorbike safety checks;
- Posters and information leaflets sent out to all high schools, colleges, businesses and other areas where there are a large number of motorbike and scooter riders.

Other road safety campaigns also take place in the borough and a typical campaign aimed at drivers include banners telling them to 'Get the Right Kit'.



## 6.2 Engineering

In addition to training and educating people to use roads safely, it is important to ensure as far as practicable that the Borough's roads are laid out and managed in a way that minimises the risk of accidents. In this respect, road safety schemes fall into two main categories: accident reduction and accident prevention.

### 6.2.1 Accident reduction

Details of all personal injury accidents reported by the Police are collated by the London Accident Analysis Unit of Transport for London (TfL). Details of all accidents in this Borough are then passed to Harrow Council for monitoring and analysis.

Remedial measures are then designed to reduce the number of accidents. Accidents are analysed to identify clusters of accidents, accident patterns and common causation factors. Accident rates are compared with Borough and London averages to help identify where action might be most beneficial. Cost benefit analysis is also undertaken to maximise the benefits in terms of casualty reduction that can be achieved with the available resources.

## 6.2.2 Accident Prevention

Prevention is better than cure. Safety aspects of new traffic proposals are of paramount importance. Care must be taken to avoid the repetition of previously identified problems, or the creation of new conflicts or hazards. This is addressed by ensuring all new schemes have a safety audit carried out by an experienced and independent safety audit Engineer at various stages of the scheme development.

Harrow has programmes for implementing 20mph zones and local safety schemes throughout the borough.

## 6.2.3 20 mph zones

Reducing speeds in and around local schools is a priority for the Council. There is a high level of public concern about the speed of vehicles and the council is working closely with the Police and the public to address the issue. The Council is concerned, not only for the number of casualties caused by excessive speed but also for the detrimental affect it has on the environment and quality of life.

A large number of evaluation studies have demonstrated a link between the introduction of 20mph zones and a subsequent reduction in casualties. The size of the reductions and the consistency of results over a wide number of areas are further evidence for this link. There is similarly strong evidence showing the benefits of traffic calming measures, which are used in 20mph zones. A key benefit of a 20mph zone is that pedestrian survival rate is increased to 97% when vehicles travel at speeds below 20mph.

Harrow has agreed a target of increasing the number of schools located within a 20mph zone in the borough to 29% of schools by 2013. The impact of introducing a 20mph zone is not only a decrease in accidents but also an increase in the local perception of safety. The resulting reduction in any traffic movement will help to reduce the number of road traffic accidents and generally improve road safety for all road users.

At present 21% of schools are located in 20-mph zones within the borough, however, over the coming years the Council is proposing to implement further zones where traffic conditions, particularly around schools, could be improved by their introduction.

A list of all 20mph zones in the borough is included in **Appendix A**.

## 6.2.4 Local Safety Schemes

To decide where to introduce measures to reduce accidents, the latest 3 year accident data is considered. Because the number of people killed or seriously injured in Harrow is very low compared with other boroughs, it is difficult to identify clusters where only the most serious accidents have taken place. For this reason, the borough considers all accidents when looking at casualty data. The latest 3 years of casualty data is shown in a map in **Appendix B** and the effectiveness of implementing local safety schemes is shown in **Appendix C**.

The scheme development work planned is focussed on the analysis of personal injury road traffic accidents data supplied by the Metropolitan Police and detailed assessments of how accidents have occurred and the layout of the environment in which they take place.

Although personal injury accidents are random events, many commonly occurring factors are shared in accidents and it is the identification of these factors, which lead to the development of engineering remedial measures. Engineering measures are therefore developed exclusively on that basis.

Future schemes include a programme of works aimed primarily at addressing accidents involving killed or seriously injured, motorcyclists and cycles. This ensures that key borough priorities are addressed as well as the national priorities.

### **6.2.5 School Travel Plans**

The Council works with all local schools to help them introduce School Travel Plans. These plans frequently require both physical measures to be introduced to the local road network as well as relevant publicity and information to be provided. The entire school community is encouraged to identify the problems and dangers that prevent them from walking or cycling to and from school. These comments are looked at by traffic engineers who develop proposals to implement traffic engineering schemes that will improve walking and cycling routes. The studies also highlight to the schools, the safety and environmental problems caused by cars on the school run and involve staff, pupils and parents in looking at ways that the school journey may be improved.

### **6.2.6 Localised Safety Parking Programme**

Poor and dangerous parking can frequently limit how safe it is for pedestrians to cross the street and vehicles to access local buildings. Poor parking can reduce sight lines which results in both drivers and pedestrians taking higher risks to go about their daily business.

This programme, formerly known as the “Problem Streets Programme”, deals with isolated locations where localised parking problems and issues occur. Typically remedial measures consist of proposals for single / double yellow lines at junctions, bends and narrowings in order to improve access. These measures also support the well established principles in The Highway Code.

The number of requests far exceeds the financial and staff resources to enable them all to be implemented and consequently a formal appraisal system is utilised to prioritise schemes and direct the limited resources to the neediest locations.

## **6.3 Enforcement**

Safety issues are a fundamental consideration for all national and local traffic regulations and their implementation. However, without proper enforcement, the traffic regulation and its safety impact is futile. Changing attitudes towards some issues is a significant help in minimising the level of enforcement required, for example, the change in attitudes to drink driving. However, regulations do need to be well enforced to maximise their impact.

Safety regulations in Harrow are primarily promoted and enforced through the use of speed and red light cameras, speed activated signs and parking attendants.

### **6.3.1 Speed and red light cameras**

Camera enforcement is one of the tools used in Harrow to improve safety. The London Safety Camera Partnership (LSCP) is responsible for implementing a comprehensive camera safety programme to reduce speed and red light running road crash casualties in London.

Camera enforcement is one of the tools used in Harrow to improve safety. The London Safety Camera Partnership exists to do three things:

- Reduce death and serious injury caused by speeding and red light running in London;
- Raise awareness about the dangers and consequences of speeding and red light running; and

- Meet the Government and the Mayor's 2010 targets for casualty reduction.

To achieve these aims the Partnership operates a combination of fixed speed, mobile speed and red light camera sites across London, making it a safer place for everyone.

The Partnership consists of the following organisations:

Transport for London (TfL)  
 Metropolitan Police Service  
 City of London Police  
 Her Majesty's Courts Service  
 London Councils

The objectives of the partnership are:

- To operate in targeted collision “hotspots” and areas of community concern around London;
- To improve driver behaviour using sustained education and enforcement; and
- To increase the support of Londoners for safety camera deployment.

Harrow works with the LSCP regarding camera installations. Since April 2007, the criteria for introducing speed and red light cameras in London are as follows:

#### *Speed Cameras*

In the most recent 36 month period there must be a collision history along the length of road of 4 Killed or Seriously Injured collisions, 2 of which must be speed related.

#### *Red Light Cameras*

In the most recent 36 month period there must be a collision history at the junction, and on the same arm, of 1 Killed or Seriously Injured collision and 1 other personal injury collision (slight). Both of these collisions must have been caused by a vehicle 'Disobeying Automatic Traffic Signals' (running a red light).

Harrow keeps the location of red light and speed cameras under continual review.

A map and information showing the location of red light and speed cameras in Harrow are provided in **Appendix D**.

### **6.3.4 Speed activated signs**

Speed (or vehicle) activated signs are used to address the problem of inappropriate speed where conventional signing has not been effective or where engineering measures would be unsuitable or unfeasible due to site constraints.

Locations where speed activated signs have been deployed are provided in **Appendix E**.



### **6.3.5 Time over distance cameras.**

A Harrow road was the first in London to trial new technology that promises to cut speeding and traffic accidents in residential areas.

A stretch of Lowlands Road, between Station Approach and Peterborough Road, was used to trial “SafeZone”, a series of time over distance cameras specially designed for busy residential roads.

The London Safety Camera Partnership chose Lowlands Road to test the new technology due to its poor accident history. In the past five years it has recorded one fatal, eight serious and 30 minor personal injury accidents.

### **6.3.6 Speed limits**

The primary purpose of a speed limit is to indicate the maximum permitted speed to be driven on a road or within a defined area. Associated to the purpose of speed limits is the need to set a limit that is appropriate for the particular road and the purposes for which it is used. The 30mph limit is applicable on all roads in England and Wales where street lighting is present unless signs show otherwise. These areas are also more often than not built-up areas.

Speed limits should fit into a rational and easily understood hierarchy if they are to be observed by drivers. Before deciding to change an existing speed limit the Traffic Authority must consider all the relevant factors, including:

- accident and casualty savings
- improvement to the environment
- improvement in conditions and facilities for vulnerable road users
- reduction in public anxiety
- increased journey times for motorised traffic
- costs of implementation
- costs of engineering measures and their maintenance
- negative environmental impact of engineering measures
- costs of enforcement

If it is considered that a change in the speed limit is the best course of action, then a speed limit Order has to be made. This involves a statutory legal process.



### **6.3.7 Civil enforcement officers (Parking attendants)**

The Council directly employs its own parking enforcement staff. In addition, at times suitably qualified agency staff assists in the enforcement process. The presence of civil enforcement officers is a deterrent to dangerous parking. Dangerous parking at junctions and bends can impair visibility and may lead to road accidents as people step out between cars with only limited view of the line of traffic. The perception of well-enforced parking regulations also increases the perception of a well-enforced road network.

## **7. MONITORING**

The following activities will continue to be monitored:

- All road accidents but particularly those involving killed or seriously injured, those involving cyclists or motorcyclists and those involving young people
- Number of schools updating their travel plans and achieving an accredited status
- Effectiveness of all Local safety schemes and 20mph zones.

## **8. PARTNERSHIP**

There is close partnership between Engineers, Road Safety Officers, school crossing patrols, the Police, Fire and Ambulance services, bus operators and Council's enforcement staff on road safety and traffic management issues. A new focus team has been established with these partners that will meet 4 times a year to discuss joint initiatives on how to reduce casualties in the Borough.

Harrow's team of civil enforcement officers provide an on-street parking enforcement programme.

The Mayor of London has responsibility for developing and implementing safe transport facilities throughout London. The Mayor can encourage bus operators to provide bus driver training to reduce collisions and to make journeys smoother.

The Police play a key role in enforcing traffic regulations and speed limits. Their direct involvement in dealing with collisions and accident data collection is vital in analysing collisions.

The Department for Transport (DfT) provides general guidance on road safety issues and sets national standards for driver training and vehicle standards and undertakes national campaigns. Transport for London play a large role in supporting London Boroughs in Road Safety initiatives and also provide funding for Local Safety Schemes, School Travel Plan implementation schemes, walking and cycling schemes, 20mph schemes, Education, Training and Publicity promotion in schools and for the continued development of School Travel Plans. The Department for Education and Skills also provide bursaries to local authorities and capital funding to schools to assist in the development of school travel plans.

## **9. FUNDING**

Funding for road safety in Harrow is predominantly provided by TfL through a borough formula funding allocation.

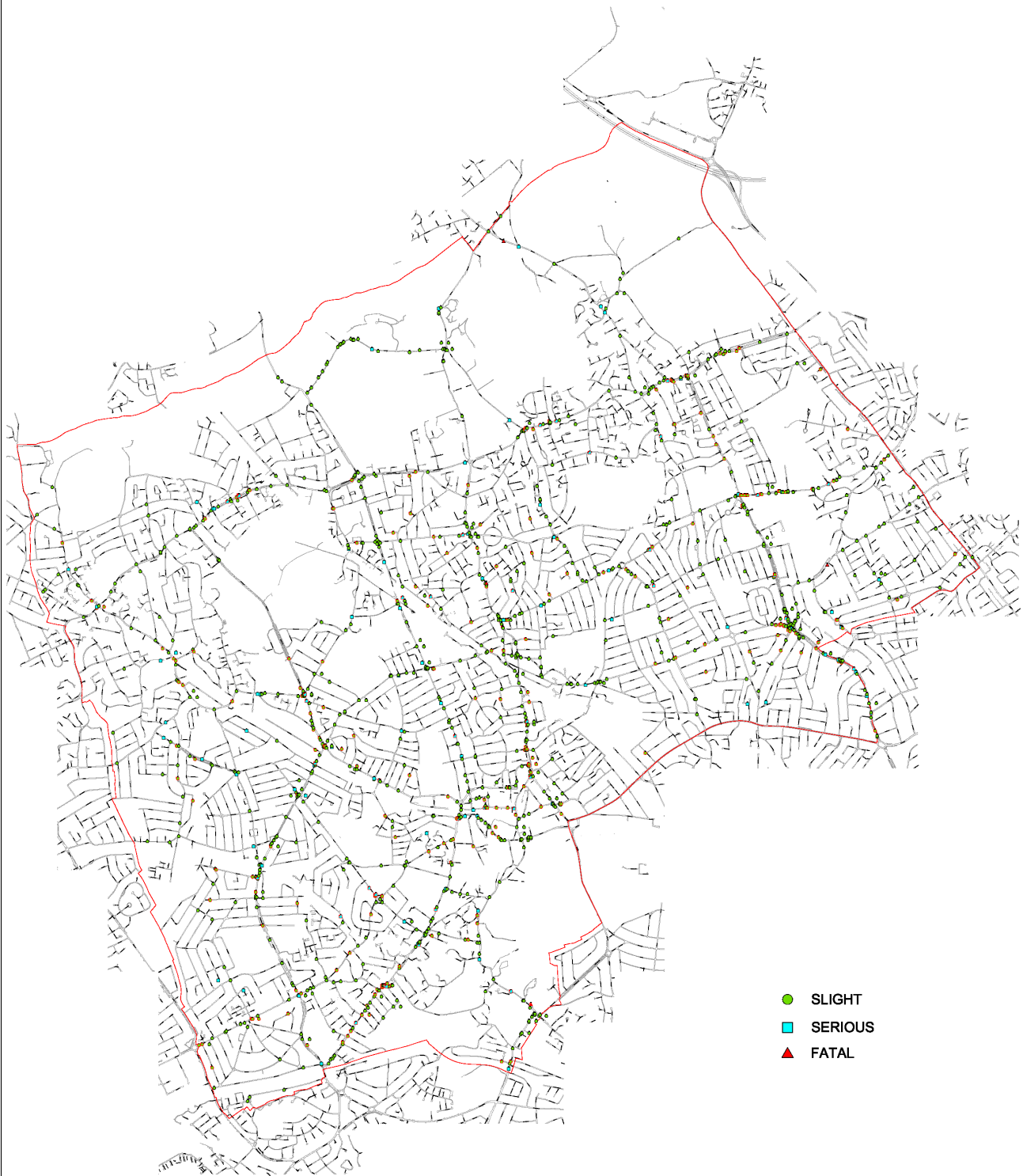
## Appendix A: 20mph zones in London Borough of Harrow

<b>20mph zones in Harrow</b>	
1	<i>Little Stanmore – 20mph zone</i> Implemented 31st October 1995 Round top road humps and speed cushions £84,000 Funded by Central Government
2	<i>West End Lane (West Lodge School) – 20mph zone</i> Implemented 21 <sup>st</sup> Feb 2005 Raised speed tables, speed cushions and entry treatments £80,000 Funded by TfL
3	<i>Wealdstone High Street - 20mph zone</i> Implemented 19 <sup>th</sup> August 2002 Pedestrianisation, raised speed table £100,000 Funded by TfL
4	<i>Whittlesea Road (Cedars School) – 20 mph zone</i> Implemented 1 <sup>st</sup> November 2004 Speed cushions / speed table and one way system £160,000 Funded by TfL
5	<i>Dorchester Avenue (Vaughan School) – 20 mph zone</i> Implemented 3 <sup>rd</sup> November 2003 Raised speed tables, speed cushions £75,000 Funded by TfL
6	<i>Charlton Road- 20 mph zone</i> Implemented March 2007 Raised speed tables, speed cushions £60,000 Funded by TfL
7	<i>Newton Farm School – 20 mph zone</i> Implemented August 2007 Raised speed tables, road humps £150,000 Funded by TfL
8	<i>Harrow on the Hill – 20 mph zone</i> Implemented May 2008 Raised speed tables, road humps, raised zebra crossings £260,000 Funded by TfL
9	<i>Whitefriars School – 20 mph zone</i> Implementation due July 2008 Raised speed tables, road humps £100,000 Funded by TfL
10	<i>Alyward School – 20 mph zone</i> Implementation Mar 2009 Raised speed tables, speed cushions £120,000 Funded by TfL
11	<i>Kenmore School – 20 mph zone (extension of Charlton Road 20 mph)</i> Implementation Mar 2009 Raised speed tables, speed cushions £120,000 Funded by TfL
12	<i>Grimsdyke School – 20 mph zone</i> Implementation Mar 2009 Raised speed table, speed cushions £120,000 Funded by TfL

<b>20mph zones in Harrow</b>	
13	<i>Pinner Wood School – 20 mph zone</i> Implementation due Mar 2010 One way, speed cushions £40,000 Funded by TfL
14	<i>Roxeth Manor School</i> Implementation Mar 2010 Speed cushions, waiting restrictions £80,000 Funded by TfL
15	<i>Norbury School</i> Implementation Mar 2010 Speed cushions, waiting restrictions £100,000 Funded by TfL
16	<i>Stag Lane First and Middle School</i> Implementation Feb 2011 Speed cushions and round top humps, one way eastbound section in Collier Drive outside school and waiting restrictions £120,000 Funded by TfL
17	<i>Earlsmead School</i> Implementation Feb 2011 Speed cushions and raised entry treatments, waiting restrictions £130,000 Funded by TfL
18	<i>Cannon Lane School</i> Planned implementation 2011
19	<i>Priestmead School</i> Planned implementation 2011

## Appendix B: Road casualty maps

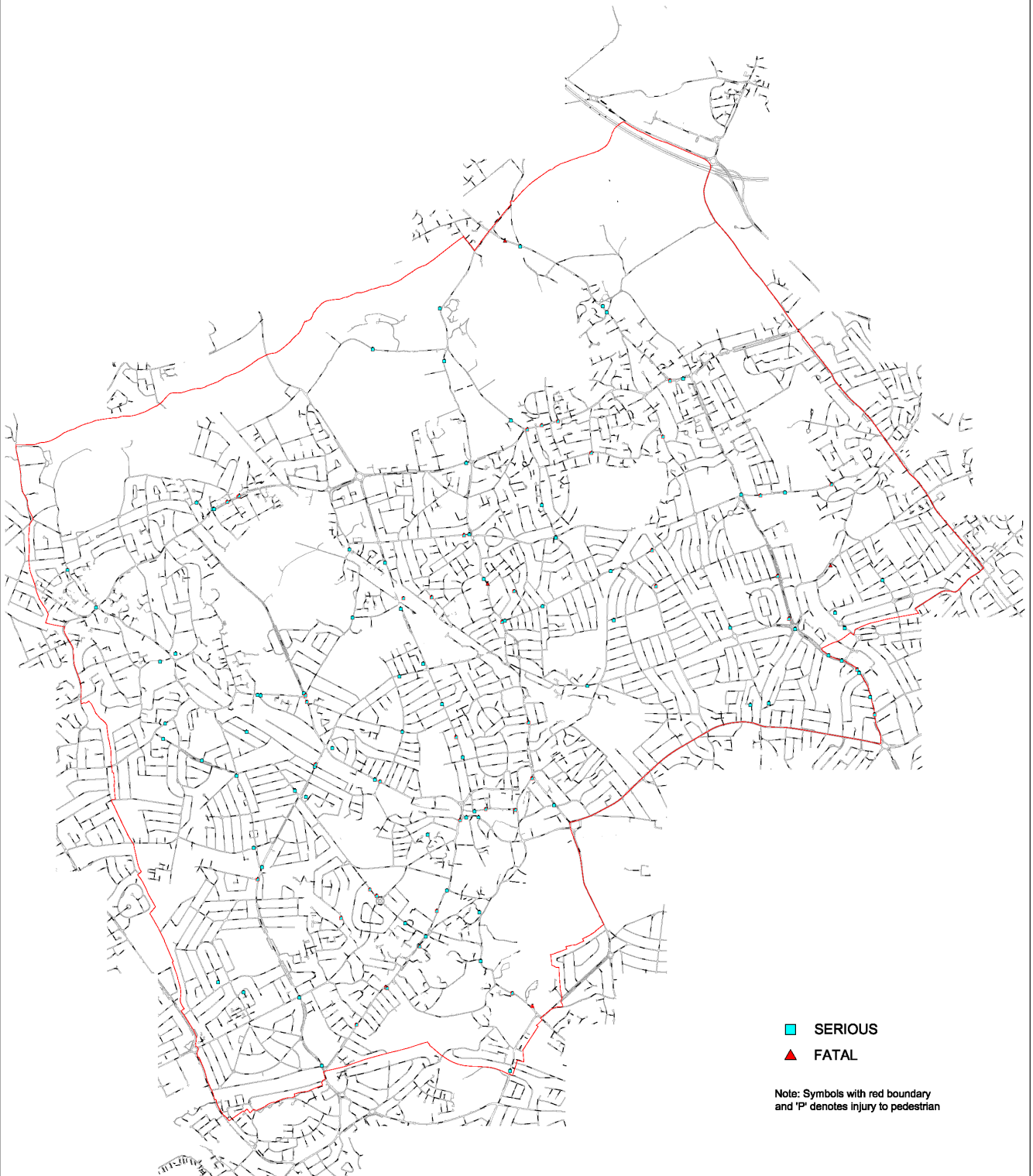
ACCIDENT PLOT FOR : All Personal Injury Accidents (LBH)  
DATA RANGE : 1 July 07 - 30 June 10



● SLIGHT  
■ SERIOUS  
▲ FATAL

plotted on: 14 Oct 10

**ACCIDENT PLOT FOR : Serious and Fatal Accidents (LBH)**  
**DATA RANGE : 1 July 07 - 30 June 10**



plotted on: 14 Oct 10

## Appendix C: Effectiveness of Local Safety Scheme implementation

The following table shows the change in accidents between 2007 -2011 following the implementation of local safety schemes: (updated Jan 12)

Scheme Name	Date scheme implemented	Before implementation			After implementation		
		Killed	Seriously injured	slights	Killed	Seriously injured	slights
Local Safety Schemes							
Stanmore Hill/The Common	Mar-07		5	14	1*	3	3
Kenton Lane	Jul-07		2	41		2	25
Camrose Ave	Mar-08	1	2	20		0	15
Honeypot Lane – Marsh Lane	Aug - 09		2	27	1	2	20
George V – traffic signals **	Sept -10		2	11		0	1
Northolt Road **	Dec- 10		1	36		2	7
Uxbridge Road **	Apr -11	2	6	12			2
<b>Total</b>		<b>3</b>	<b>20</b>	<b>161</b>	<b>2</b>	<b>9</b>	<b>74</b>

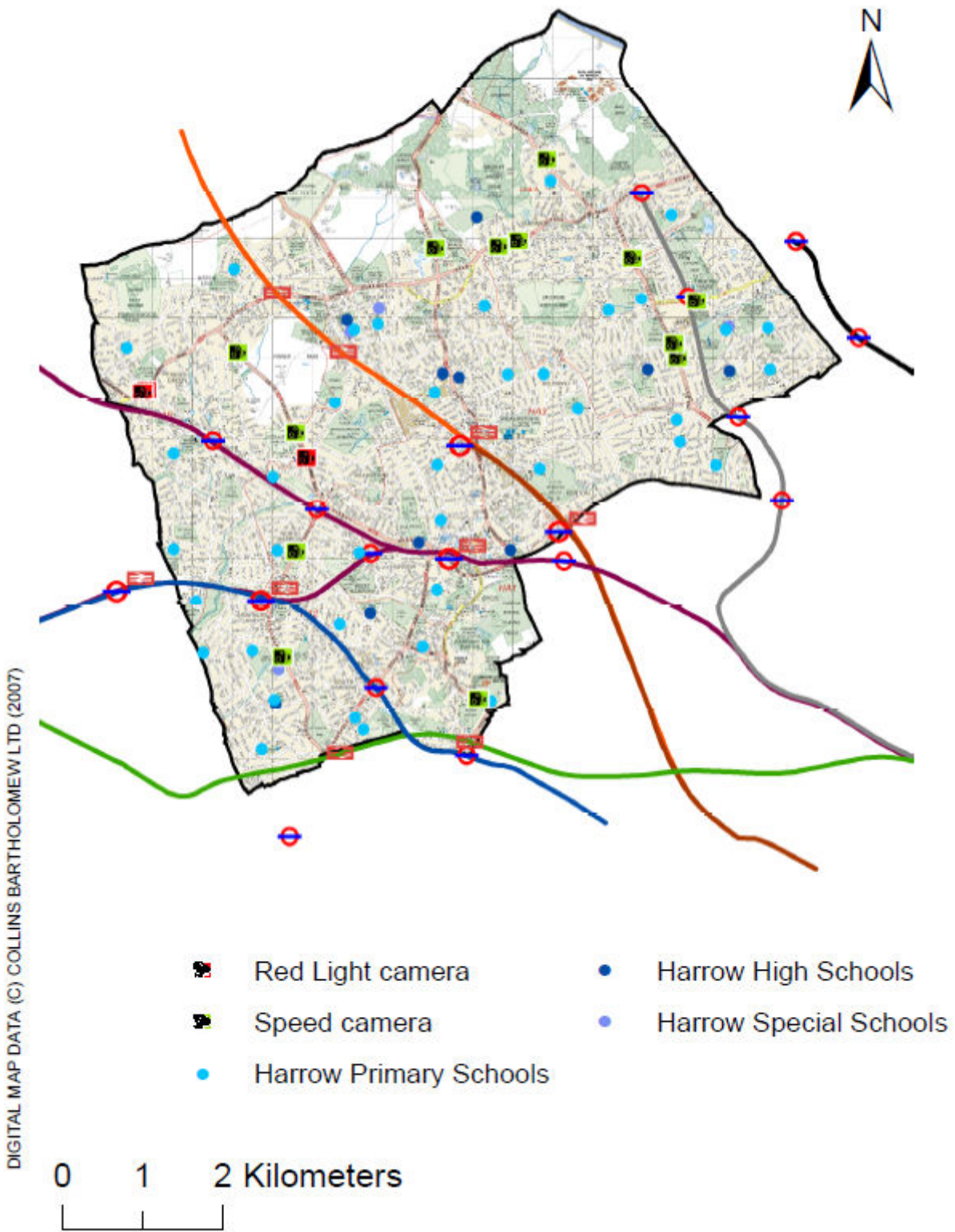
\* The fatality following scheme implementation was due to a medical condition and was not scheme related.

\*\* Accident numbers shown are for the three years before and three years after implementation or up to end of Sept 2011 if less than three years.

These figures show a reduction of 52% in killed and seriously injured and a reduction of 54% for all casualties.

Appendix D: Location of speed and red light camera sites

Speed and red light camera locations



## Red light Running Camera Sites

LOCATION	DIRECTION
<ul style="list-style-type: none"> <li>A404 Uxbridge Road Pinner Green j/w Elm Park Road.</li> </ul>	Westbound
<ul style="list-style-type: none"> <li>A404 George V Avenue, Pinner j/w Headstone Lane.</li> </ul>	Southbound
<ul style="list-style-type: none"> <li>A404 Pinner Green j/w Pinner Hill Road</li> </ul>	Eastbound

## Speed Camera Sites

LOCATION	DIRECTION & SPEED LIMIT
<ul style="list-style-type: none"> <li>A4140 Honeypot Lane, Stanmore, near j/w Broadcroft Avenue</li> </ul>	Northbound 40mph
<ul style="list-style-type: none"> <li>A4140 Honeypot Lane, Stanmore, north of j/w Wigton Gardens.</li> </ul>	Southbound 40mph
<ul style="list-style-type: none"> <li>A4140 Marsh Lane, Stanmore, opposite j/w Silverston Way.</li> </ul>	Southbound 30mph
<ul style="list-style-type: none"> <li>A409, Brookshill, Harrow Weald j/w Harrow Weald Park.</li> </ul>	Southbound 30mph
<ul style="list-style-type: none"> <li>A404 St Thomas' Drive, Pinner j/w Briants Close</li> </ul>	Northbound 40mph
<ul style="list-style-type: none"> <li>A404 St Thomas' Drive, Pinner j/w Briants Close</li> </ul>	Southbound 40mph
<ul style="list-style-type: none"> <li>A404 George V Avenue, Pinner j/w Elmcroft Crescent</li> </ul>	Northbound 40mph
<ul style="list-style-type: none"> <li>A404 George V Avenue, Pinner j/w Elmcroft Crescent</li> </ul>	Southbound 40mph
<ul style="list-style-type: none"> <li>A4140 Stanmore Hill, Stanmore j/w Wood Lane</li> </ul>	Southbound 30mph
<ul style="list-style-type: none"> <li>A4090 Alexandra Ave, near j/w Drake Rd</li> </ul>	Southbound 30mph
<ul style="list-style-type: none"> <li>A4090 Alexandra Ave, near j/w Drake Rd</li> </ul>	Northbound 30mph
<ul style="list-style-type: none"> <li>A4005 Sudbury Hill near j/w Greenford Rd</li> </ul>	Southbound 30mph
<ul style="list-style-type: none"> <li>A410 Uxbridge Rd by Hathaway Close</li> </ul>	Westbound 30mph
<ul style="list-style-type: none"> <li>A410 Uxbridge Rd by Masefield Ave</li> </ul>	Eastbound 30mph
<ul style="list-style-type: none"> <li>B461 Whitchurch Lane near Donnesfield Ave</li> </ul>	Westbound 30mph
<ul style="list-style-type: none"> <li>B461 Imperial Drive near Farm Avenue</li> </ul>	Northbound 30mph
<ul style="list-style-type: none"> <li>B461 Imperial Drive near Farm Avenue</li> </ul>	Southbound 30mph



## Appendix E: Locations of speed activated signs

Speed activated signs		
No	Road name & location	Permanent or Mobile
1	Imperial Drive (o/s no.97)	Permanent
2	Imperial Drive (o/s no. 87)	Permanent
3	Weston Drive (o/s no.95)	Permanent
4	London Road (o/s no.83)	Permanent
5	Honeypot Lane (o/s 87 Orchard Grove)	Permanent
6	Honeypot Lane (o/s 254 Everton Court))	Permanent
7	Alexandra Avenue (opp nos.101/103)	Mobile
8	Alexandra Avenue (opp no.55)	Mobile
9	Marsh Lane (o/s no.2 Green Verges)	Permanent
10	Marsh Lane (o/s no.110)	Permanent
11	Uxbridge Road (opp Arts Centre)	Permanent
12	Eastcote Road (opp Holwell Palce)	Permanent
13	Eastcote Road (opp no.33)	Permanent
14	Uxbridge Road (opp no.120)	Mobile
15	Uxbridge Road [Pinner] (opp no 504)	Mobile
16	Uxbridge Road [Pinner] (o/s no.540)	Mobile
17	Taunton Way (nr Aldridge Avenue)	Permanent
18	Taunton Way (nr Collins Avenue)	Permanent
19	Camrose Avenue (nr Tavistock Road)	Permanent
20	Camrose Avenue (nr Bacon Lane)	Permanent
21	Kenton Lane (nr Laurel Park)	Permanent
22	Kenton Lane (nr Beverley Gardens)	Permanent
23	Kenton Lane (nr Shooters Avenue)	Permanent
24	Kenton Lane (nr Kenton Park Road)	Permanent
25	Green Lane (nr Ben Hale Close)	Permanent
26	Green Lane (nr Woodside Close)	Permanent
27	Long Elmes (60m E of Mead Close)	Mobile
28	Brookshill (120m S of Brookshill Drive)	Mobile
29	Clamp Hill (140m S of Old Redding)	Mobile
30	Parkside Way (opp nos. 29/31)	Permanent
31	West End Lane (o/s no. 97)	Permanent
32	Old Church Lane (nr Abercorn Road)	Permanent
33	Wood Lane (nr Woodfarm Cottages)	Permanent
34	Wood Lane (nr Moor House)	Permanent
35	Old Redding (opp Car Park)	Permanent
36	Old Redding (just west of Car Park)	Permanent
37	Old Redding (o/s Grimswood Lodge)	Permanent
38	Old Redding (just north of Grimswood Lodge)	Permanent
39	Bessborough Road (north of West Street)	Permanent
40	Bessborough Road (south of West Street)	Permanent
41	Whitchurch Lane (opp nos.198/200)	Permanent
42	London Road HOTH (o/s "Longridge")	Permanent
43	Roxeth Hill (opp Studio/Cobblers)	Permanent
44	Stanmore Hill (TBC)	Permanent
45	Parkside Way (o/s no. 58)	Permanent
46	Weston Drive (o/s no. 33)	Permanent
47	Kenton Road (opp 18,19)	Permanent
48	Lowlands Road (Nr College entrance)	Permanent
49	Marsh Lane nr Beech Tree Close	Permanent
50	Honeypot Lane nr Wigton Gardens	Permanent
51	Pinner Road (o/s nos. 294/296)	Permanent
52	Pinner Road (o/s no. 275)	Permanent

Speed activated signs		
No	Road name & location	Permanent or Mobile
53	Pinner Road (o/s no. 547)	Permanent
54	Pinner Road (o/s nos. 97/99)	Permanent
55	Porlock Ave (o/s no.5)	Permanent
56	Porlock Ave (o/s school)	Permanent
57	Taunton Way (o/s no.68/70)	Permanent
58	Eastcote Lane (o/s no 275)	Permanent
59	Eastcote Lane (o/s no 350)	Permanent
60	Village Way (o/s no 21)	Permanent
61	Courtenay Avenue (opp no. 117/119)	Permanent
62	Courtenay Avenue (north of Pinner Park Gdns)	Permanent
63	Harrow View (opp no. 363/365)	Permanent
64	Harrow View (opp no. 70)	Permanent
65	Harrow View (opp no. 46)	Permanent
66	Headstone Lane (north of Station)	Permanent
67	Headstone Lane (south of Station)	Permanent
68	Long Elmes (o/s no 28)	Permanent
69	Somervell Road (o/s no. 224)	Permanent
70	Warren Lane	Permanent
71	Warren Lane	Permanent
72	Dalkeith Grove (o/s no 64)	Permanent
73	Dalkeith Grove (opp nos. 26/28)	Permanent