6. Road Safety Plan

INTRODUCTION

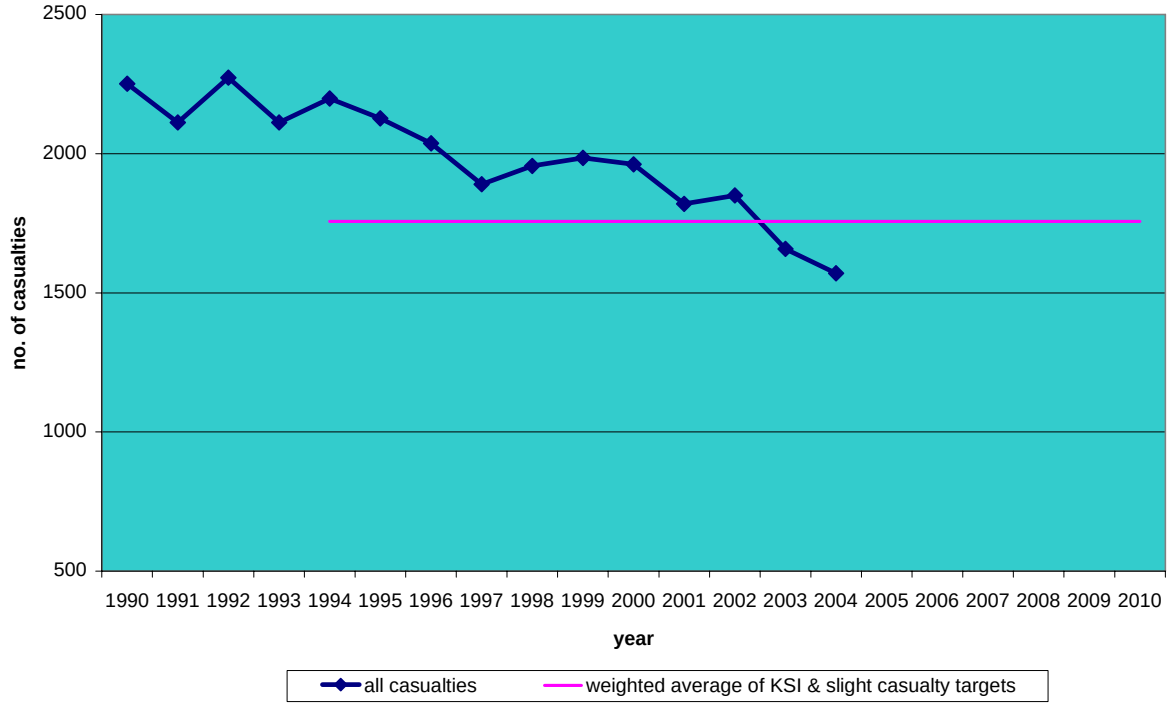
6.1 The Road Safety Plan seeks to improve road safety in Barnet by setting out a strategy to address the Borough's particular road safety issues and reduce casualties in line with both national and London-wide targets and as part of its statutory duty to promote road safety under the Road Traffic Act 1988.

6.2 Barnet is the fourth largest London borough in terms of area and has a population of 314,000 (*source: Census 2001)*, the second largest population among London boroughs. Of this population, the greatest proportion is in the 20-40 age group. Barnet has boundaries with five other London boroughs, Harrow, Brent, Camden, Haringey and Enfield. The Hertfordshire county and Hertsmere district is situated to the north of the borough.

6.3 The main road network in Barnet includes the M1, A1, A41 and A5, crossing the borough from north to south and the A406 North Circular Road crossing it from east to west. These strategic routes carry over a quarter of a million vehicles a day through the borough. The A1000 and A598 also support radial movements through the borough and link many of the borough's town centres.

6.4 In 2004 there were 1570 casualties in Barnet as a result of road traffic accidents. This represents a reduction of 5.3% compared with 2003 figures and a continuation of the generally downward trend in casualties in the borough in recent years.

Figure 6.1 – All road casualties in Barnet 1990-2004



6.5 The Council is committed to further reducing the number of casualties and making Barnet's roads safer for all road users through improved management of the road network. This Road Safety Plan provides information about road casualties in Barnet up to and including 2004, where possible, and identifies the borough's road safety targets for the next five years (to 2010).

6.6 The Plan has been developed within the framework of guidelines set by the Government and the Mayor of London and within the context of policies developed under plans and strategies adopted by the Council.

6.7 The report considers progress towards national and regional targets and identifies local casualty trends based on analysis of accident data. In most cases data has been used from the period of 1990 to 2004 to demonstrate recent trend patterns. From this information, a series of aims and objectives have been identified to tackle Barnet's specific road safety issues. Proposed actions to reduce casualties have been specified according to the road user group to which they apply and have been reviewed, along with progress, in the Summary of Key Actions.

6.8 Funding for road safety measures is allocated through the Borough Spending Plan, a document submitted annually to TfL outlining anticipated schemes and spending requirements for each financial year. Funding is also apportioned from Barnet capital funds.

6.9 Although there has been a decline in casualty figures in the borough in recent years, the Council is continually seeking ways to achieve further reductions through a range of engineering, education and enforcement initiatives. The Council recognises that road safety issues cannot be tackled independently, and therefore values the importance of working in partnership with other agencies such as the Metropolitan Police, Transport for London, other London boroughs, road user associations, and local schools and businesses, in order to meet the challenging new national and regional targets.

POLICIES, OBJECTIVES AND TARGETS

6.10 Under Section 39 of the Road Traffic Act 1988, Barnet has a statutory duty as a highway authority to "prepare and carry out a programme of measures designed to promote road safety". After the Greater London Authority Act 1999, responsibility for trunk roads transferred to Transport for London (the Transport for London Road Network or TLRN) with boroughs retaining responsibility for road safety on the remaining roads.

6.11 National and local policies seek to improve road safety by setting out a framework of aims, objectives and targets based on accident and casualty statistics that enable the effective development and monitoring of road safety policy.

6.12 The Government set new national road casualty reduction targets in its road safety strategy *Tomorrow's Roads – Safer for Everyone*, which was published

in March 2000. The new targets for 2010, measured against a baseline figure of the average casualty figures for the 5 years from 1994-1998 are;

- 40% reduction in total KSIs (killed and seriously injured);
- 50% reduction in child KSI (under 16 years); and
- 10% reduction in the slight casualty rate (injuries per 100 million vehicle kilometres)[1].

6.13 Additional road casualty reduction targets have been set for London, in the Mayor's Road Safety Plan, published in 2001. These reflect the particular circumstances for vulnerable road users in London. Taking the same baseline as national targets (comparison to 1994-8 averages), these additional targets aim by 2010 to achieve;

- 40% reduction in the number of pedestrians killed or seriously injured;
- 40% reduction in the number of cyclists killed or seriously injured; and
- 40% reduction in the number of motorcyclists (P2Ws) killed or seriously injured.

6.14 The Council is committed to achieving these targets and has developed its Road Safety Plan with consideration to national and regional guidelines including the Mayor's Transport Strategy and within the context of other plans and strategies adopted by the Council. These include:

Corporate Plan 2005/6 – 2008/9

6.15 The Corporate Plan identifies the Council's key priorities, which are as follows;

- A first class education service;
- Tackling crime;
- Supporting the vulnerable in the community;;
- A cleaner, greener Barnet; and
- Repairing roads and pavements.

6.16 The Road Safety Plan supports these priorities, and particular reference is made to maintenance of the road infrastructure and the issues faced by vulnerable road users.

Community Plan 2003-2006

6.17 The Community Plan 2003-2006 commits the Council to major investment in infrastructure with the aim of improving transport and accessibility within the borough. Objectives include reducing traffic congestion, improving public transport and repairing roads and pavements.

Revised Deposit Draft Unitary Development Plan (UDP)

6.18 The Council's Revised Deposit Draft UDP aims to ensure that the safety of road users, particularly those at greater risk, is taken fully into account when considering development proposals. (Policy M11). The Council will seek to

[1] The Government is yet to produce guidance on how this rate will be measured, so until this is available, the number of casualties has been used.

reduce accidents by refusing proposals which unacceptably increase conflicting movements on the road network or increase the risk, or perceived risk, to vulnerable road users. (Policy M12) Furthermore, the Council will expect developers to provide safe and suitable access for all road users (including pedestrians) to new developments. Where it is necessary to make improvements or changes to the road network to ensure this, the Council may require these to be financed by the development through the use of planning obligations attached to planning permissions. (Policy M13). Post inquiry changes to the revised UDP are currently being considered.

Traffic Management Strategy 2002

6.19 Barnet's Traffic Management Strategy seeks to create a safer community for residents and those who work in the borough by maximising the main road network capacity and optimising use of the major road network thereby minimising the need for extraneous traffic to use local roads to avoid main road queues. The performance of the network will be reviewed to identify problematic locations. These locations will, in turn, be overlaid with the personal injury accident map to highlight those places that suffer from the dual problem of congestion and accidents/accident delay. The dual-problem locations will then be investigated in detail and traffic engineering techniques applied to maximise capacity and obtain accident savings. This approach must now take account of the Council's five corporate objectives for Movement that were formally agreed in May 2006, and the Council's associated four key strategic policies that will contribute towards a safe, efficient and sustainable transport system. The Council's five objectives for movement are (i) To reduce the need to travel and reduce the reliance on the motor car; (ii) To promote the use of sustainable alternative travel modes; (iii) To protect people and businesses from the negative effects of traffic and parking; (iv) To ensure the provision of a safe and efficient transport system with access for all; and (v) To comply with the statutory and legal obligations of the council. In meeting these objectives the council will encourage the use of more sustainable modes of travel such as public transport, cycling or walking.

Best Value Review of Transport Policy

6.20 The Council has sought to identify the movement issues associated with a significant increase in population predicted between the years 2005-2016. The Review details a strategy for keeping Barnet moving and a series of initiatives are identified within an Action Plan to provide appropriate and safe travel choices.

TARGETS

6.21 Table 6.1 shows the individual targets set by the Government and the London Mayor and states Barnet's progress towards these targets in 2004.

6.22 There has been a reduction in the number of casualties within all the categories and significant progress made towards the set targets, however it

should be noted that for some targets, the base number of casualties is comparatively small and large random fluctuations in percentage change are to be expected. In the case of total slight casualties and cyclist KSI casualties, the targets have been exceeded. For total KSI casualties, the number in 2004 was only 4% above the target figure and on the assumption that this trend can be maintained, looks set to achieve the target reduction well before 2010.

Table 6.1 – Progress towards targets

	1994-1998 average (baseline)	Target percentage reduction by 2010	Number in 2004	2010 target casualty numbers	% change from baseline
Total number killed or seriously injured	**268.8**	**40**	**172**	**161.3**	**-36%**
Total pedestrians killed or seriously injured	**70.4**	**40**	**55**	**42.2**	**-21.90%**
Total cyclists killed or seriously injured	**14.4**	**40**	**6**	**Already achieved target**	**-58.30%**
Total powered two wheeler riders killed or seriously injured	**32**	**40**	**30**	**20.4**	**-6.20%**
Total children killed or seriously injured	**31**	**50**	**24**	**15.5**	**-22.60%**
Slight casualties (by distance travelled)	**Not yet available**	**10**	**Not yet available**	**Not yet available**	**Not yet available**
Slight casualties (in numbers)	**1772.8**	**10**	**1398**	**1595.5**	**-21.10%**

(source: LAAU)

Local Targets

6.23 The Council's strategic objectives for transport, emerging as a result of the Best Value Review are as follows;

- Reduce the need to travel;
- Improve the attractiveness and use of a choice of transport modes;
- Maximise the efficiency of the local road network;
- Secure safer transport networks; and

- Take the opportunities presented by the regeneration areas to deliver high quality transport provision and mode choice.

6.24 Barnet's Local Public Service Agreement 2003-2006 includes targets additional to those set nationally to improve the condition of local roads. Performance is measured against Best Value Performance Indicators (BVPIs) 97a and 97b, and the targets agreed to 2006 are as follows:

	Without PSA agreement	With PSA agreement
BVPI 97a	50%	65%
BVPI 97b	81%	87%

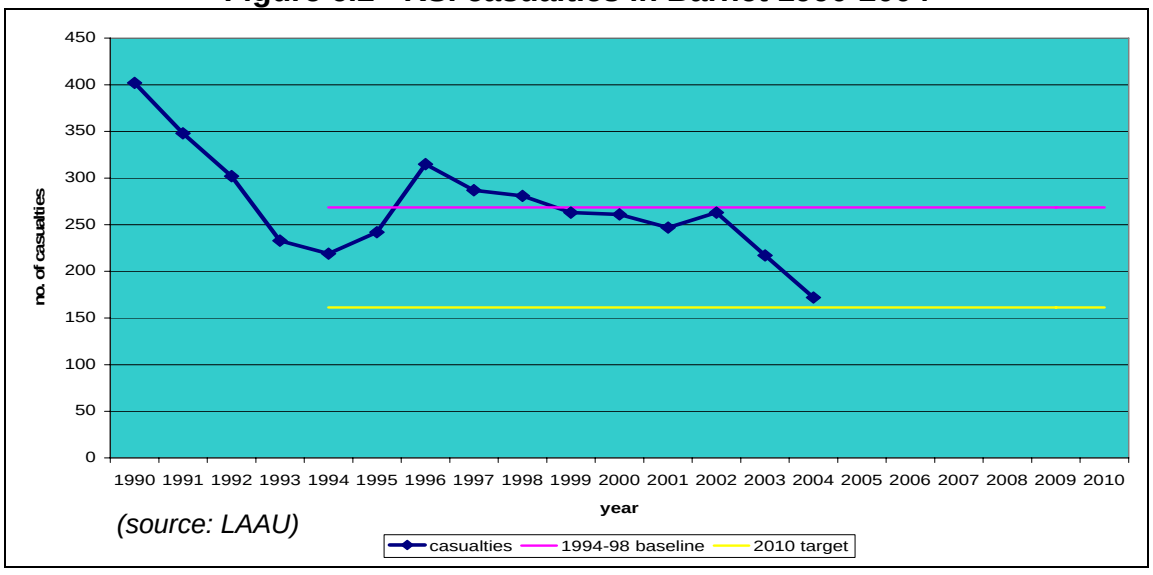
6.25 BVPI 97a refers to non-principal classified roads of which there are 21km in the borough, and BVPI 97b refers to non-principal unclassified roads which comprises the majority of borough roads, a total of 575km of road length. Both the targets for 2006 have been exceeded. At the end of the 2004/5, national standards were achieved for 88% of non-principal classified roads, and 89% for non-principal unclassified roads.

ROAD ACCIDENT CASUALTIES IN BARNET

6.26 In 2004 there were 1570 road accident casualties in Barnet, (comprising 12 fatalities, 160 serious injuries and 1398 slight injuries) which represents an overall reduction of 5.3% over 2003 figures and an continued downward trend in casualties in the borough in recent years.

6.27 As Figure 6.2 below shows, Barnet has achieved a 36% reduction in killed and seriously injured casualties (KSIs) from the baseline figure and trends indicate that the Council is likely to achieve the Government target of a 40% reduction before 2010.

Figure 6.2 - KSI casualties in Barnet 1990-2004

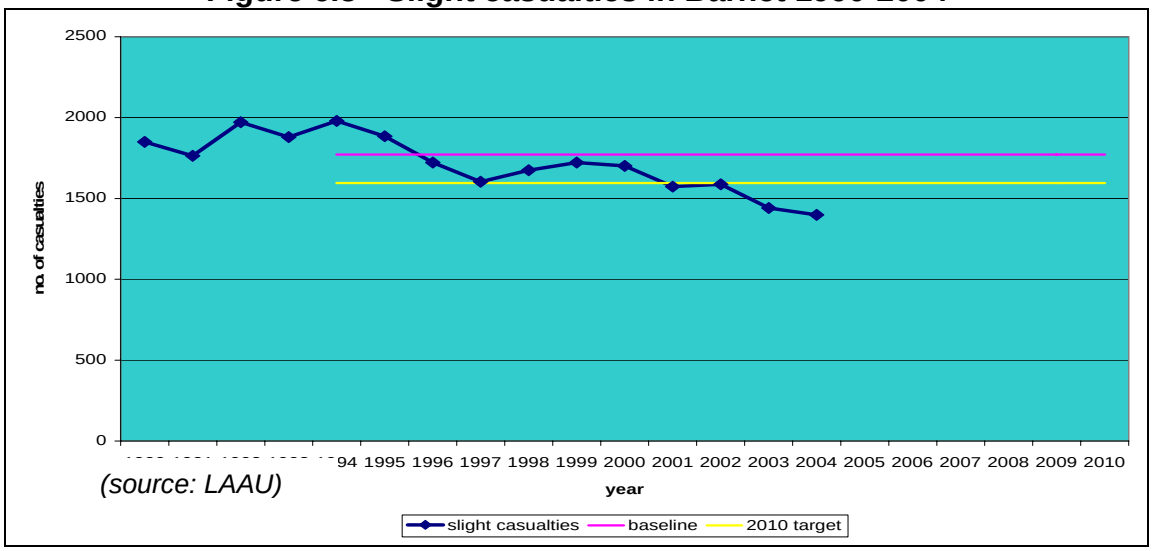


(source: LAAU)

6.28 Figure 6.3 shows that Barnet has achieved a 21% reduction in slight casualties and has therefore exceeded the Government target of a 10%

reduction by 2010. Slight injuries have been measured in absolute numbers of casualties until Government guidance is produced on how the slight casualty *rate* is to be measured.

Figure 6.3 - Slight casualties in Barnet 1990-2004



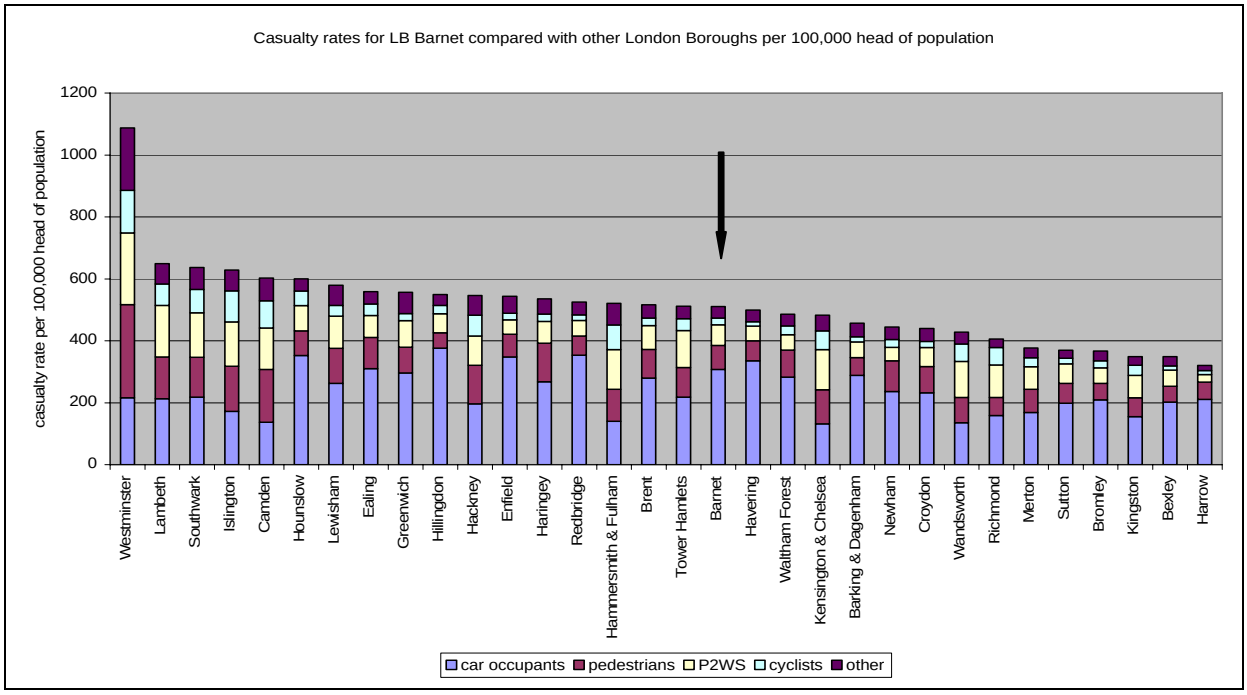
(source: LAAU)

Casualties in Barnet in comparison to other London Boroughs

6.29 Using a calculation of '*casualties per head of population'* allows Barnet's casualty data to be directly compared to that of other London boroughs. Figure 6.4 shows Barnet's casualty rate per 100,000 head of population by mode of travel in comparison to other London boroughs for the year 2003.

6.30 Barnet's casualty rate is slightly below average compared to the rest of London and lower than all neighbouring boroughs with the exception of Harrow. Casualty rates also need to be considered against road length and volume of traffic which makes Barnet's ranking reasonable given the significant length of busy motorway, TfL road and borough principal roads.

Figure 6.4 - Casualty rates in Greater London 2003

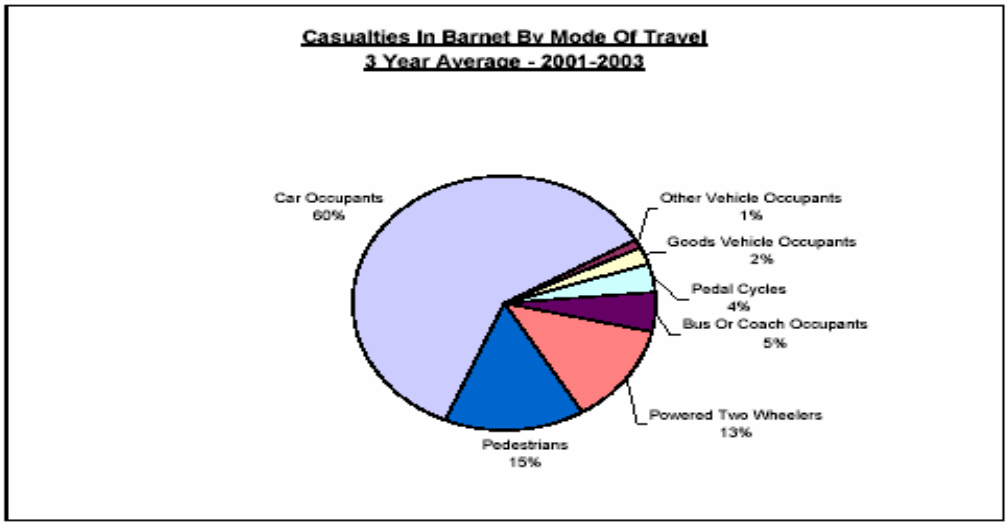


Casualty trends by user group

6.31 Figure 6.5 shows the number of casualties in Barnet by mode of travel, taking the 3-year average from 2001 to 2003. As the chart indicates, the majority of casualties in the borough are car occupants, comprising 60%, which reflects the fact that a high proportion of journeys in Barnet are made by car, as common to most outer London boroughs. This is in contrast to inner London boroughs where injuries to vulnerable road users make up a much greater proportion.

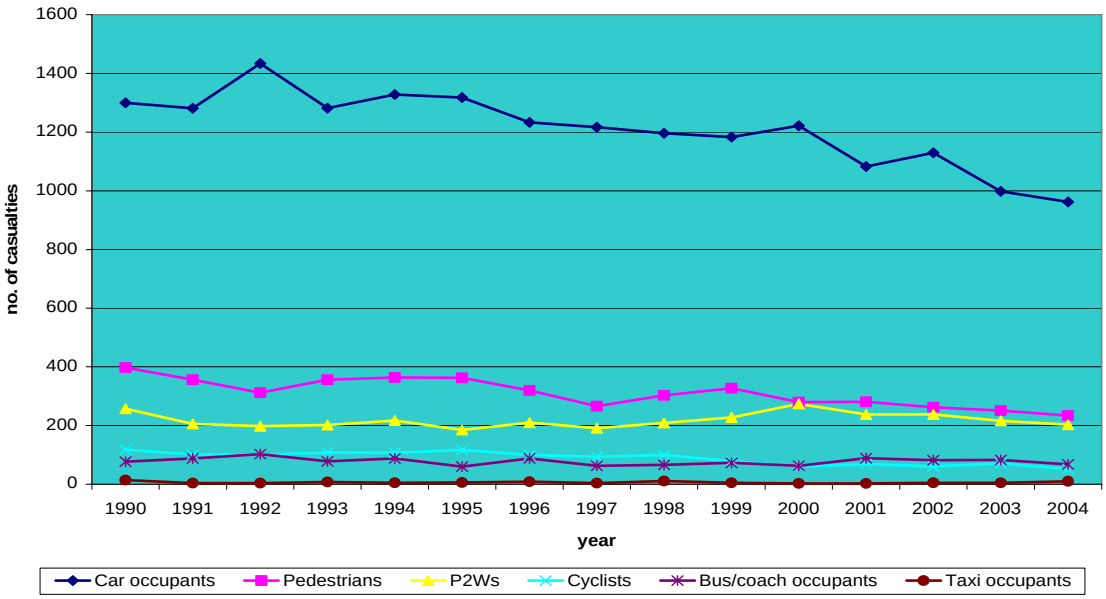
6.32 There are also relatively large numbers of pedestrian and power two-wheeler casualties, the latter showing a significant increase in recent years typifying a trend throughout London, associated with an increase in popularity of this mode. Both pedestrian and power two-wheeler casualties represent groups being targeted by the Mayor of London to achieve 40% reductions in casualties and therefore these will be individually monitored.

Figure 6.5 - Casualties in Barnet by mode of travel (3 yr average 2001-2003)



6.33 Figure 6.6 shows casualties by mode of travel since 1990 and demonstrates a longer-term trend pattern for each user group. Although the figures fluctuate from year to year, there has been a general reduction in casualties for all travel modes over the last decade. Whilst most trends are downward, casualties to P2Ws have increased, which could reflect increased ownership and use in London, particularly since the introduction of the central London Congestion Charging scheme in 2003. There has also been a slight increase in the number casualties to bus or coach occupants since 2000. This may also reflect increased use of this mode, promoted by the Mayor's Transport Strategy and increases in the number and frequency of services.

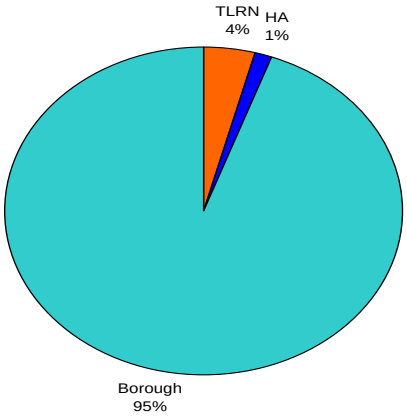
Figure 6.6 - Casualties by mode of travel 1990-2004



Casualties by Highway Authority

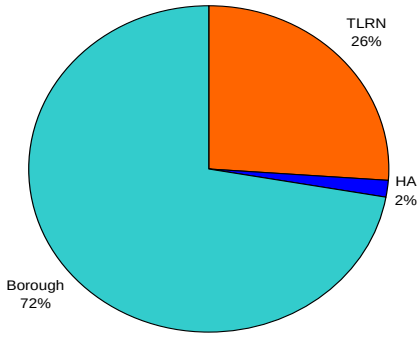
6.34 Barnet has an extensive road network, which includes over 750kms of road space, comprising approximately 11km of motorway, 30km of Transport for London Road Network (TLRN) and 700kms of roads maintained by the borough. The Highways Agency and Transport for London are the traffic and highways agencies for the motorway and trunk roads respectively.

Figure 6.7 - Percentage of the road network in Barnet by Highway Authority



6.35 Although the Council is responsible for 95% of the road network in the borough (Figure 6.7), these roads have lower volumes of traffic, and over 25% of casualties resulting from road traffic accidents in Barnet occur on roads for which the Council is not the highway authority (Figure 6.8).

Figure 6.8 - Casualties by highway authority – 3 year average 2002-2004



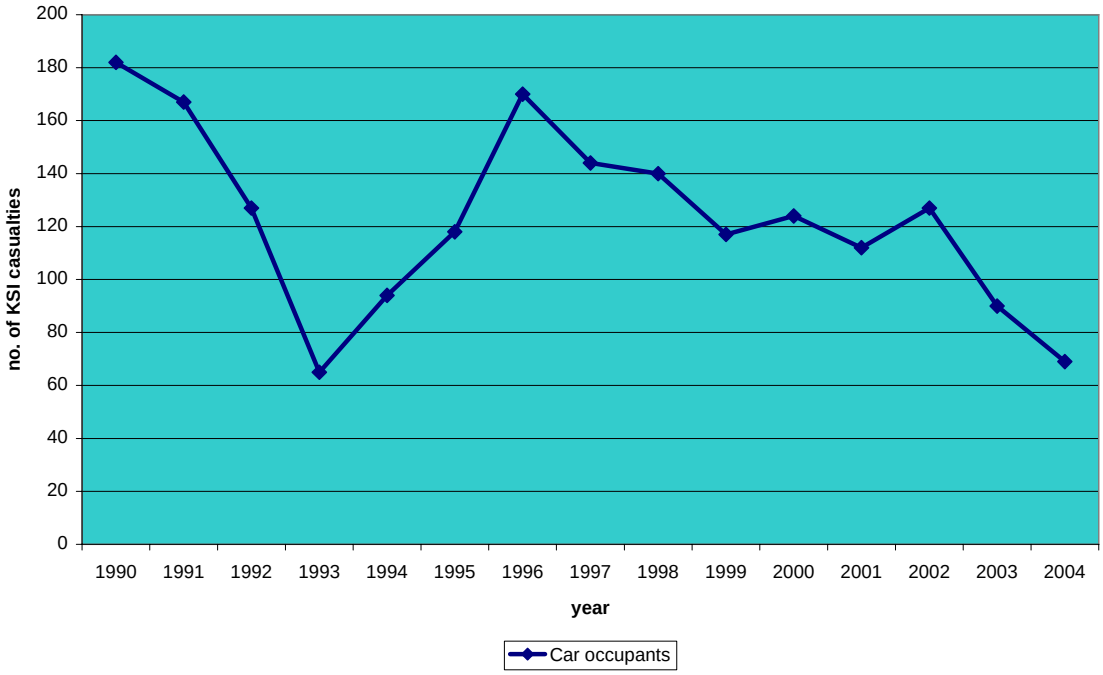
PROPOSED SAFETY MEASURES

6.36 Methods available to local authorities to help reduce road accidents generally fall into one of the following categories: *engineering, education or enforcement*. The type of accident reduction initiative proposed depends

primarily on the user group for which it is aimed, although many safety measures will benefit more than one group.

CAR OCCUPANTS

Figure 6.9 - KSI casualties to car occupants 1990-2004



6.37 Car occupants comprise the largest proportion of road casualties in Barnet, and therefore represent an important target group for the Council to pay particular attention to in its approach to road safety. The average number of car occupant casualties over the last three years in the borough was 1070, which is over four times greater than the number of pedestrian casualties, as the table below shows:

Table 6.2 – Car occupant casualties

Mode	2002	2003	2004	Average
Car occupants	1130	998	962	1030
Pedestrians	262	251	234	249
Power two wheelers	238	216	203	219
Bus or coach occupants	82	83	68	78
Pedal cycles	61	71	52	61
Goods vehicle occupants	51	25	30	35
Taxi occupants	5	5	10	7
Other vehicle occupants	21	9	11	14

6.38 Since car occupants account for such a high proportion of casualties, the Council recognises the need to pay particular attention to this group in its approach to road safety.

6.39 The Council is aware that increased car use and congestion are placing greater demands on drivers and other road users within the borough and

recognises the importance of taking a strategic approach towards management of the road network.

Maintenance

6.40 The Council currently maintains almost 700 kilometres of roads and pavements. It recognises the importance of keeping the road network operational and preventing the deterioration in condition of the transport infrastructure. Repairing roads and pavements is one of the Council's five Corporate Priorities and a maintenance programme has been developed to improve the condition of the borough's footways and local roads to improve the environment for all road users and reduce the occurrence of accidents attributed at least in part to an ageing infrastructure.

6.41 Maintenance of street lighting and road signs is also important to road safety. Reduced night-time visibility caused by defective lighting can contribute to accidents, and presents particular risks to vulnerable road users. In 2003 more than 400 accidents occurred in the hours of darkness, resulting in 9 fatalities. The Council acknowledges that high quality street lighting will benefit all road users, increasing visibility so that road users have greater awareness of approaching hazards. The Council is currently negotiating, as part of a 25-year Private Finance Initiative (PFI) contract, a programme to improve street lighting which includes the following measures:

- Maintaining the proportion of street lights working at any one time to at least 99%;
- A rapid response to dealing with faulty lights; and
- Replacing outdated and failing stock.

6.42 Ensuring the appropriate use of traffic signs and markings on the road and ensuring the maintenance of these signs can also achieve improved safety. Inappropriate or damaged road signs can cause unnecessary confusion to road users and may lead to risky manoeuvres on the road, thereby increasing the likelihood of accidents.

Congestion

6.43 Increasing congestion on roads is a major problem throughout London and poses a hazard to the safety of all road users. Barnet is strategically positioned within North London's major highway network, and is crossed from north to south by the A1, A41, A5 and the M1 and from east to west by the North Circular Road (A406). These strategic routes carry over a quarter of a million vehicles a day, with a substantial proportion of these journeys being made by "through traffic". As these routes become more congested, traffic is increasingly likely to divert onto less suitable borough roads, increasing the likelihood of accidents.

6.44 Around three quarters of road traffic accidents in the Borough occur on 'local' roads and increased use of these roads by through traffic poses a particular hazard to vulnerable road users such as children and the elderly. In order to manage future predicted movement demands, the Council is currently carrying out an audit of the borough's road network. *Corridor studies info.*

6.45 Poorly managed works on the public highway can also lead to accidents both directly and indirectly through the effects of increased congestion. The Council aims to ensure better management of these works in order to keep traffic flowing and reduce the risk of accidents.

Local safety schemes

6.46 Engineering measures can improve road safety at locations that have been identified as local accident blackspots. Collision patterns are analysed at locations where there have been a relatively high number of accidents, and the most appropriate engineering schemes are proposed for that location. Accident locations are identified in terms of *cluster* sites. Typically these are at junctions, where there is a higher potential for road user conflicts. Locations with an above average number of collisions involving injury within the last 3 years are identified annually.

6.47 A programme of local safety schemes is proposed annually based on detailed accident investigations and bids for funding for these schemes are identified in the Borough Spending Plan. Accident data is monitored before and after schemes are implemented in order to gauge the effectiveness of engineering measures. The 2005/6 Local Safety Scheme programme is included as Table 6.3 identifies ten accident cluster sites where large numbers of accidents have occurred.

6.48 Engineering programmes have contributed significantly to the reduction in casualties across the borough. A table listing the borough's Local Safety Scheme programme since 2000 with before and after accident data for the treated sites is attached in Table 6.6. Accident figures are monitored for 36 months before and after scheme implementation. In the case of recent schemes, the figures have been factored up in order to give the *anticipated* accident reduction for that scheme.

Actions

- The Council will continue to invest in a programme to improve the borough's roads and pavements, to monitor and improve the condition of street lighting and traffic signs.

- The Council will continue to monitor traffic flows on roads in the borough and will seek to improve flows on borough principal roads to reduce the incidence of rat-running in residential streets.

- The Council will undertake an annual programme of Local Safety Schemes at identified accident cluster sites across the borough and will monitor the effectiveness of these schemes after implementation.

Table 6.3 - Local Safety Scheme programme (2005/06)

Scheme name	Scheme description	Target accidents	cost (£000)	Total accidents (36 months)	Predicted accident saving (36 months)
A1000 Buckingham Ave to Lyonsdown Rd	Renew pedestrian crossing facilities. Introduce waiting restrictions. Junction improvement to reduce right turning accidents.	Pedestrians accidents and accidents in the dark.	230	27	10
Colindale Avenue	Junction improvements. New signal installation. Improve pedestrian environment at junctions.	Turning accidents and pedestrian accidents.	170	21	7
Claremont Road	New zebra crossings. Upgrade roundabouts. Improve crossing points. Increase width of footpath near bus stop.	Turning accidents and accidents in the dark.	140	10	6
High Street, Barnet	Review & adjustments of signal timings. Review and enhancements to pedestrian crossing facilities. Improve carriageway markings.	Pedestrian and powered two wheeler accidents.	170	40	10
High Road, Whetstone including Totteridge Lane and Oakleigh Road	Widening of Totteridge Lane to facilitate pedestrian refuge across mouth of junction. Localised widening of footpath.	Pedestrians and powered two wheeler accidents.	180	48	12
Station Road, Edgware	Realign footway. Rephase lights at junction with A5 to remove conflict with vehicles turning left from Station Road. Improve crossing at exit to bus station.	Pedestrians and bus passengers.	80	53	12
Watling Avenue	Relocate pelican crossings. Relocate bus stops to reduce uncontrolled pedestrian movements. Kerb re-alignment.	Pedestrians and bus passengers.	100	20	7
Graham Park Way	Remove mini-roundabouts and convert to traditional junction layout with STOP lines. Introduce waiting restrictions to improve sight lines.	Drivers failing to give way or stop.	70	22	5
The Broadway, Mill Hill	Relocate pelican crossings and bus stops. Remove pinch point. Review loading and waiting restrictions.	Pedestrians	80	40	10
Brent Street	Improve crossing facilities. Remodel Bell Lane junction. Create improved bus stopping facility.	Pedestrians	160	31	8

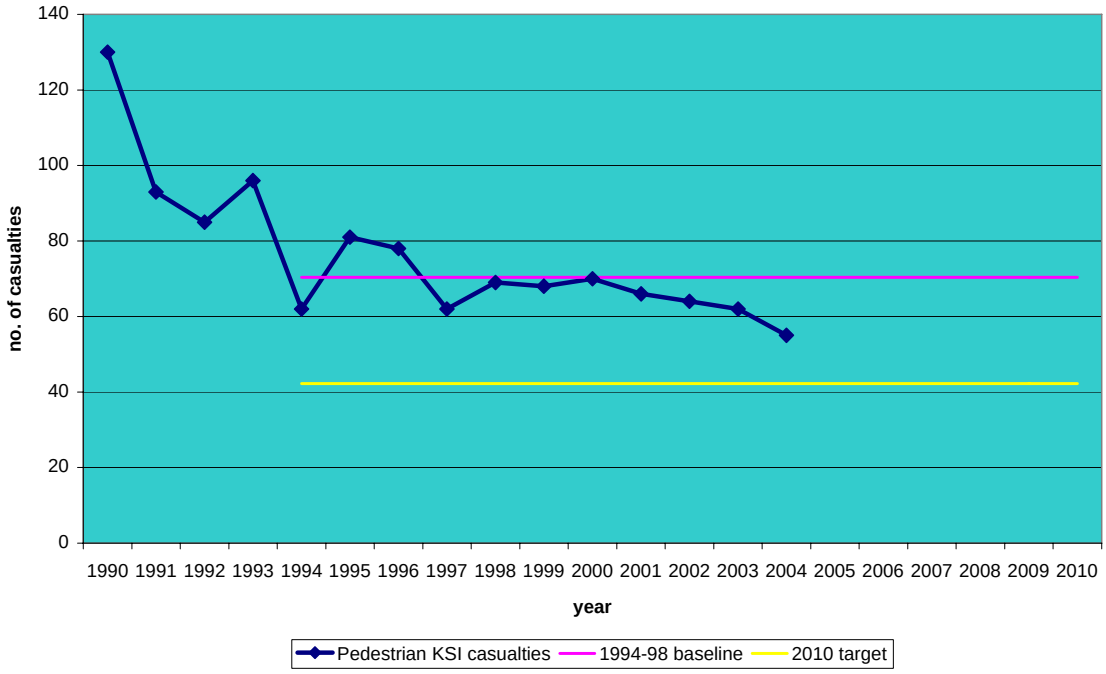
PEDESTRIANS

6.49 Pedestrian KSI casualties have fallen steadily over the last few years, and, in 2004, were 22% below the 1994-1998 baseline figure. A continuation of the current trend would indicate that Barnet is likely to achieve the Mayor's target of a 40% reduction in casualties by 2010.

Maintenance

6.50 Well-maintained footways make journeys by foot safer and more attractive. High standards of footway maintenance help reduce the risk of accidents, particularly in areas with high levels of pedestrian movements, such as town centres, access to public transport, and routes to schools. Good quality lighting is also important at night , particularly in town centres, where there are greater numbers of pedestrians.

Figure 6.10 - Pedestrian KSI casualties in Barnet 1990-2004



6.51 As part of the Winter Maintenance Service 2004/5, precautionary gritting was carried out on selected footways following risk assessments. The assessments considered usage, location and gradients and the footways highlighted were mainly in town centres or in the vicinity of public transport interchanges.

Vehicle activated signs

6.52 Barnet has a number of vehicle activated signs at select locations across the borough, which are used to display hazard warning messages to passing traffic. These signs use a radar system to detect the speed of vehicles and are used on roads where inappropriate speed has led to car occupant or pedestrian casualties.

6.53 There are currently vehicle activated signs at the following locations in the borough:

a) Frith Manor School, Lullington Garth	2 x school "*slow down"*
b) Monk Frith School, Monk Frith Way	1 x school "*slow down"*
c) King Alfred School, North End Road	1 x school "*slow down"*
d) Hadley Highstone	2 x 30 mph
e) Mays Lane	4 x 20 mph
f) Longmore Avenue	2 x 30 mph

6.54 The Council also has plans for five mobile signs that can be deployed around the borough at accident hotspots during 2005/6.

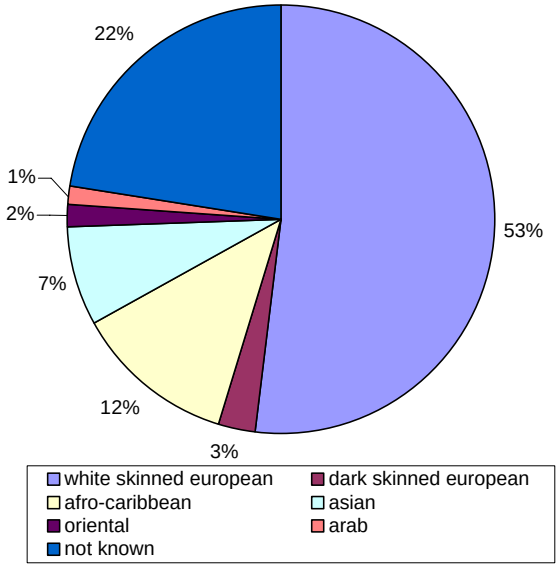
Actions

- The Council will set out an annual footway maintenance programme to improve the condition of borough footways, with priority given to areas with high numbers of pedestrian movements.
- The Council will set up a rolling maintenance programme of all zebra crossings in the borough and will carry out a programme to review pedestrian phasing at all signal controlled junctions.
- The Council will expand the use of vehicle activated signs across the borough, with the addition of mobile signs to be deployed at borough accident hotspots.

ETHNIC BREAKDOWN OF PEDESTRIAN CASUALTIES

In 1995 traffic police began recording the ethnic origins of casualties of road traffic accidents. Figure 6.11 shows pedestrian casualties in 2001 by ethnic group, as recorded by the Police.

Figure 6.11 – Pedestrian casualties in 2001 by ethnicity



Not all of the identification categories for ethnic grouping used by the police match those used in the 2001 Census, and can only be loosely correlated for the following three (Table 6.4) in order to compare the ethnic breakdown of pedestrian casualties to that of the borough population as a whole.

As table 6.4 indicates, in 2001, although only 7% of the borough population was classed as black or black other, 12% of pedestrian casualties in 2001 were from these groups. Similar disparities occur in child pedestrian casualties. It should be noted, however, that in almost a quarter (22%) of casualties, the ethnicity was not known or not recorded. In order to investigate the relationship between the risk of pedestrian injury and ethnicity, more detailed information would be beneficial.

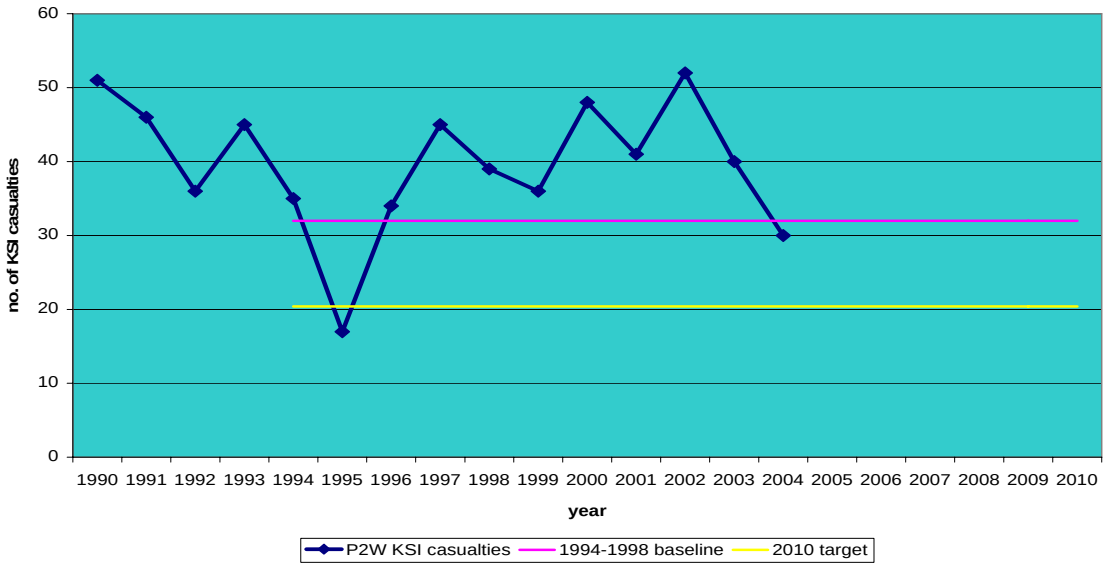
Table 6.4 – Ethnic group representation as % of borough population and as % of pedestrian casualties

TfL/Stats 19	2001 Census classifications	Ethnic group as a % of borough population (2001)	Ethnic group as a % of pedestrian casualties (2001)
White Skinned European	***White – British/Irish/Other White***	74%	53%
Afro-Caribbean	***Mixed – White and Black Caribbean/African Black/Black British/Caribbean/ African/Other***	7%	12%
Asian	***Mixed – White and Asian/Other mixed Asian/Asian British/Indian/ Pakistan/Bangladesh/Other***	13%	7%

MOTORCYCLISTS

6.55 Despite a decline in the number of casualties to motorcyclists over the last two years, the longer trend pattern shows a steady increase in casualties to this group. In 2004 there were 30 killed or seriously injured casualties of powered two-wheelers in Barnet. Although this represents a reduction of 25% over 2003 numbers (40), the number of KSIs is only 6.3% below the 1994-98 baseline figure and represents the category furthest from the Mayor's target reduction number (20).

Figure 6.12 - P2W KSI casualties in Barnet 1990-2004



6.56 The increase in P2W casualties is a London-wide problem, and reflects increased ownership and use of these vehicles in the capital in recent years, and in particular since the introduction of the central London Congestion Charging scheme in 2003.

6.57 The Council acknowledges that this problem merits further consideration, and will continue to monitor patterns of motorcyclist accidents in the Borough as part of its ongoing accident review programme. The Council will also continue to refer motorcyclists to the British Motorcycle Federation (BMF), who run training courses for all abilities of riders, from beginners to advanced. In addition the Council believes that the issue should also be addressed on a London-wide basis.

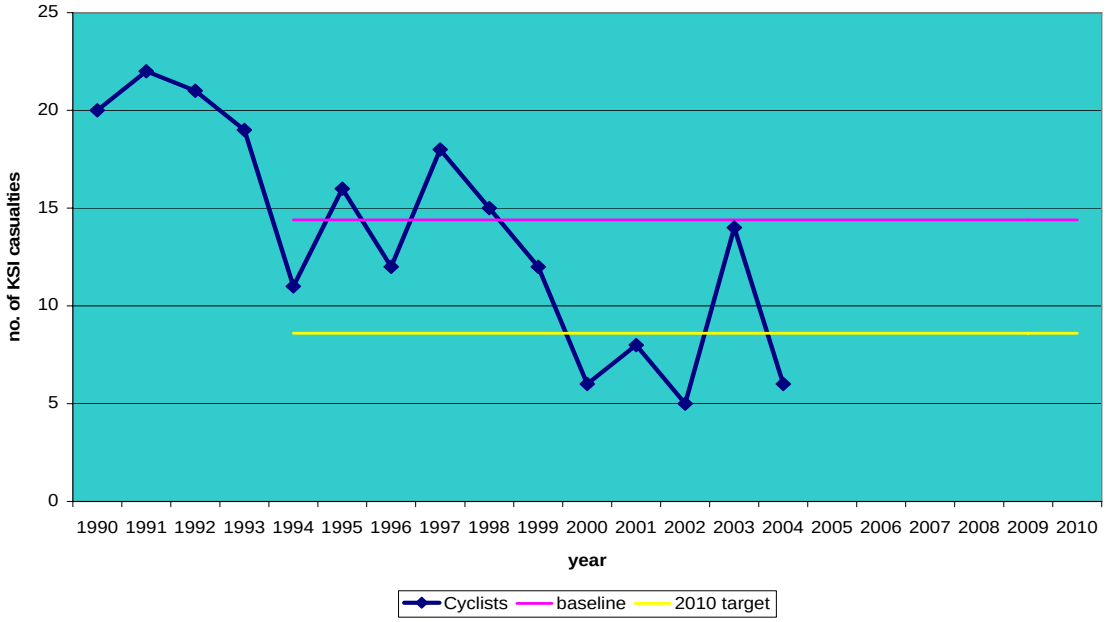
Actions

- The Council will continue to monitor levels of P2W casualties and locations where these accidents occur. Further analysis of the causation factors will be carried out to ascertain the most likely causes of P2W accidents in order to determine which preventative measures can be taken.
- The Council will continue to refer motorcyclists to the BMF for training and will support London-wide publicity materials relevant to this travel mode.

CYCLISTS

6.58 There has been a significant reduction in the number of casualties to cyclists since 1990. KSI numbers have reduced significantly since 1990, although as the numbers are generally very low, annual fluctuations tend to distort the trend line.

Figure 6.13: Cyclist KSI casualties in Barnet 1990-2004



6.59 The Council considers child cyclists an important target in relation to casualty reduction as they comprised 21% of 2003 cycle casualties and are most likely to respond to educational road safety measures. The number of children cycling to school could potentially increase with the development of School Travel Plans.

6.60 It should be noted that as the 1994-98 baseline figure for cyclist KSI casualties is low, an increase in the popularity of cycling, as promoted by the Mayor's Transport Strategy could result in an increase in casualties amongst this user group.

Cycle training

6.61 Cycle training is currently offered to all Year 6 pupils, and comprises a mixture of practical and theory sessions. Training in undertaken during school holidays and aims to develop confidence through a range of classroom, playground and on-road instruction.

6.62 Training is also offered to Year 7 and 8 pupils who want to cycle to school. After an initial assessment, pupils are trained on their route to and from school on an individual basis. The main emphasis of this training is to give the pupils risk management skills which will enable them to develop other cycling routes other than the ones they have been trained on.

6.63 The Council is also working with local cycle groups to assess the feasibility of running adult cycle training courses. This is likely to focus initially on those adults who have cycling experience but are keen to improve their skills and build up their confidence on the road.

Actions

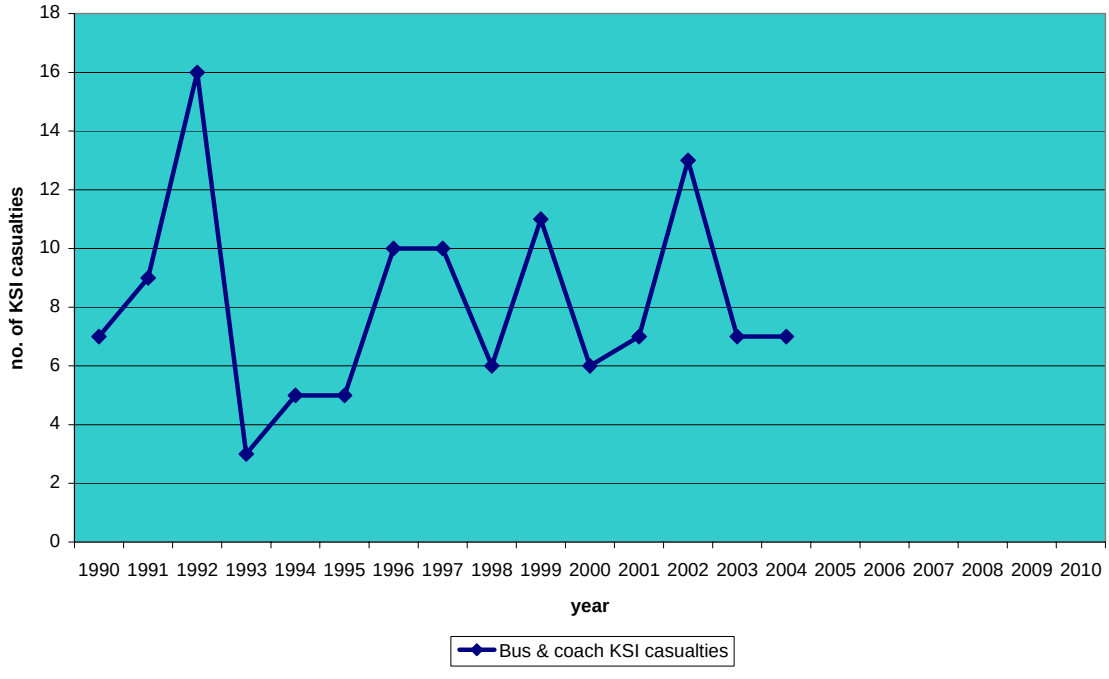
- The Council will continue to organise cycle training courses for Year 6 pupils, and will look to expand the number of training sites in order to increase the number of pupils trained.
- The Council will continue to offer Year 7/8 cycle training to all secondary schools within the borough, and will consider ways to facilitate and expand the provision of this training.
- The Council will also assess the feasibility of organising adult cycle training courses.

BUS AND COACH OCCUPANTS

6.64 There has been a slight increase in the number of KSI casualties to bus and coach occupants over the last decade. In this same timescale both the frequency and patronage of bus services have risen considerably.

6.65 Although it has limited powers to directly influence bus and coach occupant casualty numbers, the Council is keen to improve accessibility at bus stops by ensuring that buses are able to pull into the kerb properly allowing passengers to board and alight safely.

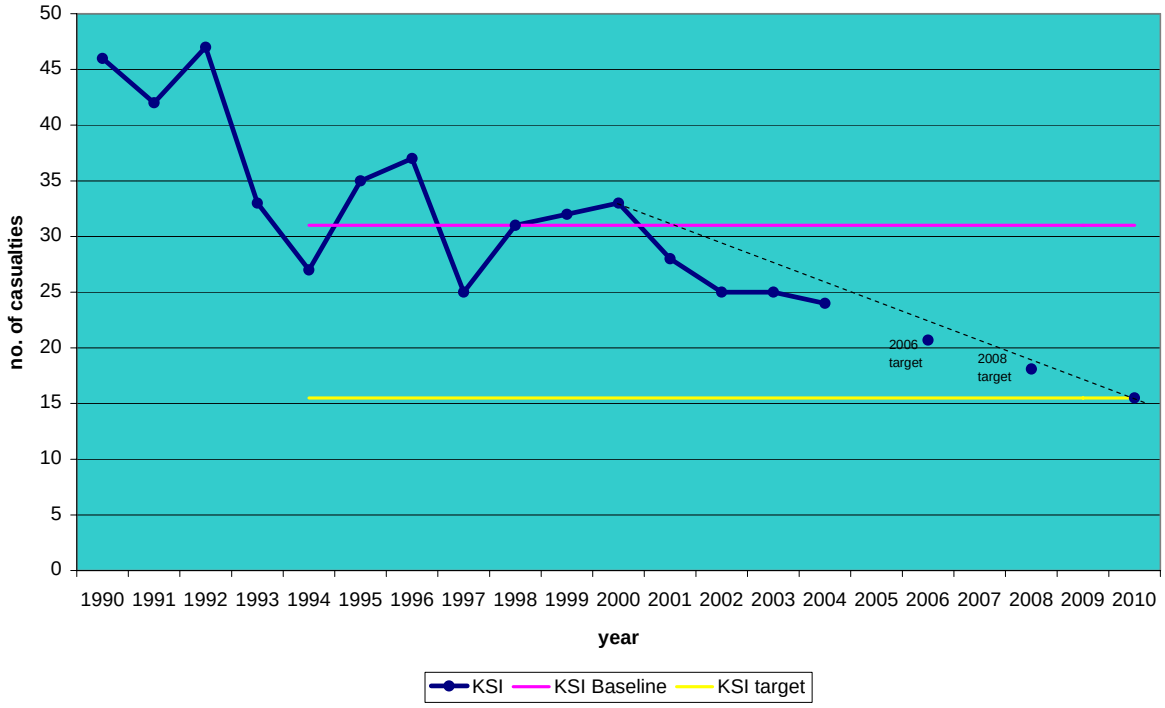
Figure 6.14: Bus & Coach KSI casualties 1990-2004



CHILDREN

The number of children injured on Barnet's roads has fallen significantly since 1990. In 2004 there were 24 children killed or seriously injured on the borough's roads. This represents a 22% reduction from the 1994-1998 baseline figure of 31, and considerable progress towards the Mayor's 2010 target of a 50% reduction.

Figure 6.15 – Child KSI casualties in Barnet 1990-2004



School Travel Plans

6.66 School Travel Plans highlight concerns and issues related with travel to school based on information from staff, parents, children and other interested parties, such as the Police. In its School Travel Plan a school will identify practical initiatives, set targets and provide a programme for implementation to reduce traffic in the vicinity of schools. It also aims to improve safety within the walking environment to encourage more pupils and parents to walk to school, and will work in conjunction with the Council to promote initiatives such as SRTS.

6.67 There are 152 schools in Barnet, consisting of 118 LEA schools and a further 34 independent schools. Of these, 47 are currently in the process of writing a School Travel Plan. The Council is keen for all schools in the borough to develop travel plans in line with Government targets for 2010 and has set its own target to have 30 School Travel Plans completed by 2006. Further

details of local objectives and targets are included in Barnet's School Travel Plan Strategy (Chapter 8).

Review of safety around schools

6.68 A review of safety will be completed around 122 schools (80%), by 2008, based on the predicted STP programme, as part of the School Travel Plan process. This involves a comprehensive safety audit of the school's locality completed in consultation with the school staff. In order to meet the regional target of safety to be reviewed around all schools by 2008 the Council commits to carrying out independent reviews around the remaining 30 schools (20%) during the academic year 2008-09 in preparation for starting a STP plan with these schools.

6.69 To complete the review of safety, members of the traffic management and safety team will visit the school location to assess all aspects of highway, footway, parking facilities, street furniture, crossing facilities, signs and lines and will consider issues such as parking, congestion and pressure on crossing points. The use of 20 mph zones will be considered at sites where inappropriate speed is a primary concern.

Safer Routes to School

6.70 The Safer Routes to School programme consists of both engineering measures on the roads around the school and educational projects within the school designed to help children become safer and more independent road users. As well as the health benefits for the children who are encouraged to walk or cycle to school, schemes can help reduce congestion in the vicinity of the school and the surrounding area. Engineering measures typically include elements such as;

- improved signage and carriageway markings;
- parking restrictions around school areas;
- pedestrian crossing improvements; and
- visibility improvements.

School-based projects

6.71 The Road Safety Team supports a number of school-based projects such as the Healthy Activities & Practices with Pre-School Years (HAPPY) project, 'Let's be safe', and Safer Moves. These consist of a combination of classroom-based and practical training for children from pre-school to Year 6, which are run with the support of teaching staff and/or parents.

Walking bus

6.72 A walking bus is a scheme where a minimum of two adults (usually parents) accompany a group of children along a set route to and from school. The walking bus scheme encourages parents and children out of their cars and therefore helps reduce the impact of the school run. It also allows children to

gain the health benefits associated with exercise and to develop their road safety skills. The Council's Road Safety Unit are involved in setting up and monitoring the scheme, and safety checking the proposed routes.

6.73 There are currently four schools (Christchurch, Frith Manor, Queenswell, Monken Hadley) operating a walking bus scheme to/from school, although it is anticipated that other schools may identify a demand to run a similar scheme when compiling their STP.

School Crossing Patrols

6.74 Barnet currently has school crossing patrols at 10 sites across the borough. The Council's Road Safety Team is responsible for the evaluation of proposed patrol sites and the training and monitoring of personnel. School crossing patrols are currently employed at the following sites;

a) Dollis Junior School, Pursley Road, NW7
b) Colindale School, Poolsford Road, NW9
c) St Vincent School, The Ridgeway, Mill Hill NW7
d) All Saints School, Cricklewood Lane, NW2
e) Brunswick Park School, Osidge Lane, N14
f) Frith Manor School, Lullington Garth, N12
g) Bell Lane School, Hendon, NW4
h) Brookland Infant & Junior School, NW11
i) Moss Hall Infant School, N3
j) Parkfields School, NW4

6.75 A number of additional sites have been identified as part of the School Travel Plan process and School Crossing Patrol personnel have been recruited to fill two of these.

Actions

- The Council will publish its School Travel Plan Strategy and will encourage schools to develop travel plans aimed at reducing car use on the school run. A programme of Safer Routes to School engineering schemes will be undertaken on an annual basis to support the school travel plan process.
- The Council will carry out a review of safety around all schools, where possible as part of the school travel plans process.
- The Council will continue to identify suitable locations for school crossing patrols and to support the recruitment of additional School Crossing Patrol officers.
- The Council will endeavour to reduce school gate parking and will carry out a review of school keep clear restrictions around schools.

SUMMARY OF KEY ACTIONS

6.76 The Action Plan presents the Council's proposals to reduce the number of road casualties in Barnet. The Plan will be reviewed on an annual basis in order to monitor progress towards casualty reduction targets and to measure the effectiveness of road safety proposals.

Table 6.5 - Summary of Key Actions

Current Actions	Progress to date	Future Actions/Targets
For all road users		
To continue to monitor traffic accident data.	Ongoing	To identify emerging trends using accident data analysis.
To carry out post-fatal site visits in conjunction with the Police.	Site visits carried out as requested.	
To improve the condition of all borough roads.	Barnet has exceeded LPSA target for non principal classified and unclassified roads.	To continue investment towards Government 2010 targets and corporate targets. (*LIP c/way targets)*
To monitor the condition of street lighting and illuminated traffic signs.	PFI contract secured. Significant improvements planned.	To nominate PFI partner by April 2006. 75% of street lighting furniture to reach European Standards by the end of 2010.
To undertake a programme of Local Safety Schemes at identified accident cluster sites across the borough and monitor their effectiveness.	A programme of LSS schemes is identified annually.	To monitor the cost/benefit effectiveness of LSS schemes on an annual and 3-year basis.
To monitor the effects of the External Road Network on Barnet's roads.	The movement capabilities of the borough's Strategic Road Network has been discussed with TfL and road network corridor studies are being prepared. The first two will cover A406 (Hanger Lane to Bounds Green) and A5/A41 corridor.	To complete the initial corridor studies to identify future investment and improvement opportunities.
To make the borough's streets more accessible for all road users by removing unnecessary street clutter.	De-cluttering of roads and footways is being carried out as part of the carriageway and pavement improvement programme.	
Pedestrians		
To conduct a survey, of all zebra crossings in the borough.	Survey recently completed.	To put in place a responsive maintenance programme by end (2005/06).
To carry out a programme to review pedestrian phasing at all signal controlled junctions.	A feasibility study will be carried out during 2006/7.	To carry out detailed design on 6 junctions without pedestrian phasing.
To improve the condition of all	A footway maintenance	To continue the maintenance

borough footways.	programme is currently underway and areas with high numbers of pedestrian movements have been identified.	programme targeting town centres and high usage areas such as schools, hospitals. *(LIP footway targets).*
To expand the use of vehicle activated signs at accident hotspots across the borough.	There are currently twelve signs across the borough. The Council plans to have five additional mobile signs for deployment around the borough during 2005/6.	To put together a programme of suitable locations for the mobile VA signs and monitor their effectiveness. This will be carried out in consultation with the Police.
P2Ws		
To conduct further analysis of P2W accidents.	Ongoing.	To identify emerging trends in P2W accidents.
To continue to refer motorcyclists to the BMF for initial training.	Ongoing.	To refer qualified motorcyclists to the Bikesafe scheme to improve rider skills.
Cyclists		
To organise cycle training courses for children aged 10 to 11 years (year 6) during the school holidays.	14 courses are currently planned for 2005 which will provide training for over 400 children.	To increase the number of sites in the borough where training can take place. To consider running training outside the conventional school holidays to include pupils from faith schools.
To organise cycle training for Year 7/8 children for journey to/from school.	Following a pilot scheme, Year 7/8 training is offered upon request.	To expand the promotion and facilitate the provision of Year 7/8 training.
To assess the feasibility of running adult cycling courses in conjunction with local cycling groups.	Barnet has set up links on its website to cycling groups offering training.	
Bus/coach		
To continue to monitor accidents involving buses or coaches to determine likely cause.	Ongoing.	To encourage TfL to take direct action in their role as bus provider for London.
To improve bus stop accessibility.	Audit of bus stops to be undertaken.	Set up a programme of works for various bus stops on busy bus routes.
Children		
To publish the Council's School Travel Plan Strategy and distribute to school representatives.	The Strategy forms Chapter 8 of the LIP.	The Strategy will be reviewed and consulted upon annually.
To encourage individual schools to develop travel plans aimed at reducing car use on the school run.	8 STPs have been completed, and 60 schools have initiated the process.	The Council has set a target to oversee the completion of 30 STPs per year for the next three years.
To undertake a programme of engineering measures around schools in conjunction with SRTS.	For 2005/6 engineering schemes have been programmed for 9 schools in the borough.	To set out annual programmes at schools who have initiated the STP process.
To carry out a review of safety around all schools.	Reviews are being carried out as part of the STP process.	To complete a safety review of 80% of schools (122) by 2008. Independent reviews of the remaining schools to be carried out during the academic year 2008/9.
To identify locations suitable	There are currently 10 sites in the	To continue to identify locations

for school crossing patrols.	borough with school crossing patrol officers.	for SCP officers as part of the STP process.
To continue to support the recruitment of SCPs.	The Council's School Travel Plan Strategy supports initiatives to evaluate recruitment issues.	Officers to promote the SCP service as part of the STP process.
To work with parking enforcement officers to reduce school gate parking.	Review of school keep clear restrictions around schools complete.	To set up an enforcement list of schools to be monitored.

Table 6.6 - Local Safety Scheme programme since 2000

2000/2001 Programme											
Location	**Scheme Description**									**Cost**	**Date installed**
Finchley Road/GoldersGreen Road NW11	Re-introduction of left turn into Golders Green Road and signal modification at junction									£35,000	Jun-Jul 00
Highwood Hill/Marsh Lane NW7	Traffic signals									£40,000	Oct-Nov 00
Osidge Lane N14 (Chase Side to Hampden Square)	Traffic management measures									£11,000	Nov-Dec 00
Dollis Road/Nether Street N3	Mini-roundabout									£113,000	Jan-Feb 01
Lichfield Road NW2 (Cricklewood Lane to boundary)	Improved pedestrian facilities and traffic management measures									£45,000	Mar-01
A5 West Hendon Broadway (including Wilberforce Road/Herbert Road area)	Pedestrian facilities on A5 between Herbert Road and Garrick Road and traffic management measures in Wilberforce Road									£30,000	Mar-Apr 01
Casualities	Before			After			Change			Change (total)	% Change
	F	S	SI	F	S	SI	F	S	SI	-13	-18.6
	2	13	55		5	52	-2	-8	-3		

2001/2002 Programme			
Location	**Scheme Description**	**Cost**	**Date installed**
Ballards Lane (Nether Street to Alexandra Grove)	Traffic management measures and junction works	£150,000	Apr-May 01
A5 j/w The Hyde	Pelican crossing by Sainsburys	£20,000	Jun-Aug 01
Meadway/Potters Road/Potters Lane	Traffic islands	£17,000	Aug-Sept 01
Barnet Lane (by Ravenscoft School)	Pedestrian crossing facilities	£20,000	Sep-01
Totteridge Common (Hendon Wood Lane to pond – approx. 300m)	Carriageway markings	£2,000	Sep-01
Southover/Northiam (Sussex Ring to Laurel View)	Pedestrian refuges	£15,000	Sep-01
Hampden Way (Chase Way to Mandeville Road)	Junction control	£20,000	Oct-Dec 01
North End road NW11 (West Heath Drive to borough boundary)	Traffic management measures	£22,000	Jan-Mar 02
Nether Street N3 (C	Pedestrian facilities and traffic management measures	£15,000	Jan-Mar 02

East Barnet Road (Victoria Road to Margaret Road)	Revised junction control and zebra crossing by Sainsburys	£180,000	Jan-Mar 02
Alexandra Road NW4	Traffic management measures	£17,000	Feb-Mar 02
Brunswick Park Road (Osidge Lane to Brunswick Avenue)	Traffic management measures	£30,000	Feb-Mar 02
Dryfield Road, Burnt Oak	Traffic management measures	£17,000	Feb-Mar 02

	Before			After			Change			Change (total)	% Change
	F	S	Sl	F	S	Sl	F	S	Sl	-41	-41.8
Casualities	0	16	82	0	9	48	0	-7	-34		

2002/2003 Programme			
Location	**Scheme Description**	**Cost**	**Date installed**
Meadway NW11 (Hampstead Way to Kingsley Way)	Traffic management measures	£30,000	June 02
Friern Barnet Road/Station Road	Conversion of junction control from mini-roundabout to traffic signals	£41,000	Jun-Jul 02
Longmore Avenue/Netherlands Road/York Road	Modified junction control	£78,000	Jul 02
Brent Street NW4 (Bell Lane to Brampton Grove)	Improved street lighting	£133,000	Jan-Mar 03
East End Road (Ossulton Way to Stanley Road)	Traffic management measures and traffic signals at Ossulton Way	£70,000	Feb-Mar 03
Barnet Gate Lane (Barnet Road to Mays Lane)	Improved street lighting	£115,000	Feb-Mar 03
Station Road, East Barnet	Improved street lighting and pelican crossing at Warwick Road junction	£65,000	Feb-Mar 03
Oakleigh Road South	Improved street lighting	£25,000	June 03
Hale Lane, Edgware (Broadfields Avenue to Selvage Lane)	Improved street lighting	£80,000	Mar 03
Edgware Road/Kingsbury Road NW9	Improved street lighting at junction	£28,000	

Casualties	Before			After			Change			Total Change	% change
	F	S	Sl	F	S	Sl	F	S	Sl	-13	14.4
	1	18	71		2	75	-1	-16	4		

(F= fatally injured, S=serious injuries, Sl = slight injuries, as defined by DfT