

AGENDA ITEM: 6	Pages nos: 1 - 12
Meeting	Chipping Barnet Area Environment Sub-committee
Date	14 March 2012
Subject	Road Traffic Personal Injury Accident Clusters – data analysis
Report of	Interim Director, Environment, Planning and Regeneration
Summary	The report contains further data analysis regarding accident cluster sites in the Chipping Barnet area

Officer Contributors	Jane Shipman
Status (public or exempt)	Public
Wards affected	All
Enclosures	Appendix 1 – Table of accident cluster locations and circumstances Appendix 2 – Analysis of accident patterns and contributory factors Appendix 3 – Contributory factors assigned across clusters boroughwide
For decision by	Chipping Barnet Area Environment Sub-committee
Function of	Executive
Reason for urgency / exemption from call-in	Not applicable

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1. RECOMMENDATION

1.1 That the sub-committee note the contents of the report

2. RELEVANT PREVIOUS DECISIONS

- 2.1 Chipping Barnet Area Environment sub-committee, 24 November 2011, item 6, resolved:
- That an update report including a breakdown of accidents at hotspot locations over the last three years be brought to the next appropriate meeting of the Sub-Committee.

3. CORPORATE PRIORITIES AND POLICY CONSIDERATIONS

- 3.1 The Corporate Plan priority “A Successful London Suburb” includes the objective “to work with all strategic partners (particularly the Police) to ensure Barnet is a safe place”.

4. RISK MANAGEMENT ISSUES

- 4.1 No risk management issues arise directly out of this report.

5. EQUALITIES AND DIVERSITY ISSUES

- 5.1 In Barnet the majority of road traffic casualties are car occupants but, in common with other areas, pedestrians, cyclists and motorcyclists are more likely to be seriously injured if involved in an accident. Younger adults aged 17 to 30 are disproportionately likely to be traffic casualties but older people (over 70) are more likely to suffer serious injury. 12-16 year olds are also slightly more likely to be seriously injured. Men are more likely to be road traffic casualties than women.
- 5.2 There are documented links between deprivation and accident risk and some evidence of variation between ethnic groups that is independent of differences in deprivation.

6. USE OF RESOURCES IMPLICATIONS (Finance, Procurement, Performance & Value for Money, Staffing, IT, Property, Sustainability)

- 6.1 No use of resources implications arise directly out of this report.

7. LEGAL ISSUES

- 7.1 The Council has a statutory duty under section 39 of the Road Traffic Act 1988 to monitor traffic accidents on its road network and take such measures as appear appropriate to address them.

8. CONSTITUTIONAL POWERS

- 8.1 Constitution Part 3 – Responsibility for Functions – Area Environment Sub- Committees perform functions that are the responsibility of the Executive including highways use and regulation not the responsibility of the Council

9. BACKGROUND INFORMATION

- 9.1 Accident information is recorded by the Police in accordance with the national Stats 19 reporting system. In London the information is provided to Transport for London who produce a wide range of reports and also make the data available to individual boroughs.

- 9.2 A report to the Area Environment sub-committee on 24 November 2011 identified locations in the borough and in the sub-committee's area where seven or more Personal Injury Accidents had occurred in the three year period 2008-2010. The report also included background information which may be helpful in interpreting this report.
- 9.3 The sub-committee asked for further analysis based on the latest three year period and the table at Appendix 1 includes a summary of the circumstances and involvement at each of the accident clusters in the Chipping Barnet area with 7 or more accidents in the three year period to the end of September 2011 (the most recent data available when analysis was undertaken – provisional October data was received on 31 January). The locations will not correspond exactly to those in the November report because the data for the more recent three year period has been used to identify the accident clusters.
- 9.4 Appendix 2 includes more detailed analysis of accident patterns and contributory factors for those locations with 10 or more accidents in the three year period. Contributory factors are assigned by the police at the time of the accident and will not generally be based on detailed investigation. Up to six contributory factors can be ascribed to a single accident and factors may be assigned as likely or possible when originally recorded.
- 9.5 A number of contributory factors are commonly recorded and have not been included in Appendix 2. These are
- Driver/rider failed to look properly (61% of cluster accidents)
 - Driver/rider failed to judge another persons path or speed (30% of cluster accidents)
 - Driver/rider careless/reckless/in a hurry (21% of cluster accidents)
 - Pedestrian failed to look properly (20% of cluster accidents)
 - Driver/rider poor turn or manoeuvre (13% of cluster accidents)
 - Pedestrian careless/reckless/in a hurry (10% of cluster accidents)
 - Pedestrian failed to judge another persons path or speed (9% of cluster accidents)
- 9.6 Appendix 3 provides more information on the proportions of accidents where each contributory factor is recorded across the identified clusters boroughwide.

10. LIST OF BACKGROUND PAPERS

10.1 None

Legal – JKK
CFO – MC

APPENDIX 1 - accident cluster locations and circumstances

Based on accident 01/10/2008 - 30/09/2011 (2011 data provisional)								Accidents involving																								
Cluster ID	GENERAL LOCATION	Fa	Se	KSI	Slight	Tot.	Pedestrians	Conditions			Age				Vehicle types (more than one vehicle will be involved in some accidents so totals may exceed 100%)																	
							pedestrians (borough road average = 25%)	accidents on wet road surface (borough road average = 20%)	accidents in darkness (borough road average = 27%)	children under 16 (Number)	children (under 16) % (borough road average= 9%)	persons aged 60 or more (number)	persons aged 60 or more % (borough road average = 14%)	powered 2 wheeler (motorcycle) (number)	powered 2 wheeler (motorcycle) % (borough road average = 15%)	cycles (number)	cycles % (borough road average = 8%)	taxi (number)	taxi % (borough average = 2%)	car (number)	car % (borough road average = 87%)	minibus (number)	minibus % (borough road average = <1%)	Bus/Coach (number)	Bus/coach % (borough road average = 7%)	Goods Vehicle <= 3.5 tonnes (number)	Goods Vehicle <= 3.5 tonnes % (borough road average = 7%)	Goods Vehicle >3.5<7.5 tonnes (number)	Goods Vehicle >3.5<7.5 tonnes % (borough road average 1%)	HGV >=7.5 tonnes (number)	HGV >=7.5 tonnes % (borough road average = 1%)	
CB	3	HIGH ROAD J/W TOTTERIDGE LANE	0	1	1	15	16	18%	18%	43%	2	13%	2	13%	1	6%	1	6%	0	0%	16	100%	0	0%	4	25%	1	6%	0	0%	0	0%
CB	4	WOODHOUSE ROAD J/W COLNEY HATCH LANE	0	1	1	15	16	25%	18%	37%	2	13%	3	19%	2	13%	2	13%	0	0%	14	88%	0	0%	4	25%	0	0%	0	0%	0	0%
CB	15	HIGH STREET J/W MEADWAY	0	1	1	10	11	45%	18%	27%	1	9%	1	9%	1	9%	1	9%	0	0%	8	73%	0	0%	1	9%	1	9%	0	0%	1	9%
CB	21	BARNET HILL J/W UNDERHILL	0	3	3	7	10	30%	40%	40%	1	10%	4	40%	1	10%	1	10%	0	0%	6	60%	0	0%	4	40%	1	10%	0	0%	0	0%
CB	22	HIGH STREET J/W WOOD STREET	0	0	0	10	10	40%	30%	30%	1	10%	4	40%	1	10%	0	0%	0	0%	8	80%	0	0%	1	10%	1	10%	0	0%	0	0%
CB	25	HADLEY GREEN J/W HIGH STREET	0	1	1	9	10	50%	10%	20%	4	40%	2	20%	0	0%	1	10%	0	0%	8	80%	0	0%	1	10%	2	20%	0	0%	0	0%
CB	43	BARNET LANE J/W TOTTERIDGE VILLAGE	0	1	1	6	7	0%	0%	14%	0	0%	0	0%	1	14%	0	0%	0	0%	7	100%	0	0%	0	0%	0	0%	0	0%	0	0%
CB	48	PINKHAM WAY J/W COLNEY HATCH LANE	0	0	0	7	7	0%	14%	42%	0	0%	0	0%	1	14%	0	0%	0	0%	7	100%	0	0%	0	0%	1	14%	1	14%	0	0%
CB	57	WOODHOUSE ROAD, 40 METRES SOUTH WEST OF LYNDHURST	0	1	1	6	7	85%	28%	14%	0	0%	1	14%	0	0%	0	0%	0	0%	7	100%	0	0%	0	0%	0	0%	0	0%	0	0%
CB	58	STATION ROAD J/W LYTTON ROAD	0	0	0	7	7	42%	0%	28%	0	0%	0	0%	0	0%	0	0%	0	0%	6	86%	0	0%	0	0%	1	14%	0	0%	0	0%
CB	59	NFL GREAT NORTH ROAD J/W STATION ROAD	0	0	0	7	7	42%	14%	0%	0	0%	0	0%	2	29%	0	0%	0	0%	7	100%	0	0%	0	0%	0	0%	0	0%	0	0%

APPENDIX 2 - Accident patterns and contributory factors in Clusters with 10 or more accidents in three years

Cluster 3 HIGH ROAD J/W TOTTERIDGE LANE

16 personal injury accidents occurred at this location in the three years 01/10/2008 – 30/09/2011

1 accident resulted in serious injury
15 accidents resulted in slight injury only

Contributory factors assigned as likely or possible (not all factors included)

2 disobeyed traffic signal
1 pedestrian impaired by alcohol
2 aggressive driving
1 travelling too fast for the conditions
1 inexperienced or learner driver/rider
1 junction overshoot
1 driver/rider vision affected by stationary or parked vehicles and/or pedestrian crossed road masked by stationary or parked vehicle
1 driver/rider vision affected by vehicle blind spot
1 vehicle door opened or closed negligently
1 junction restart
1 emergency vehicle on a call
1 loss of control
1 sudden braking

Accident patterns

4 right turners in/out of Totteridge Lane in collision with a northbound vehicle (2 RT in, 2 RT out).
1 additional collision between a northbound and eastbound vehicle at or near A1000/Totteridge Lane – details slightly unclear.

3 pedestrian accidents, 2 left turn into Totteridge Lane colliding with child (age 14/15 Feb and April 2010). 1 southbound vehicle colliding with pedestrian on crossing.

2 lane change accidents on southbound approach to Oakleigh Road North

1 northbound shunt, 1 motorcycle attempting to overtake vehicle turning right off Totteridge Lane in advance of junction, 1 U turn on Oakleigh Road North, 1 door opened into cyclist on Oakleigh Road, 1 oversteer turning left into Totteridge La, 1 RT into Oakleigh Road North in collision with a southbound vehicle.

Accidents occurring in darkness are above average at 43% compared with a borough road average of 27%. Over a longer term accidents in darkness appear to be closer to the average. The location was not in the Capital Improvement Programme under the street lighting PFI but are planned for intervention replacement/improvement in the next two years.

4 accidents = 25% involved a bus or coach. This is well above the borough average of 7% but may simply reflect the higher than average level of bus movement. There is no obvious pattern to these accidents.

Possible Action:

Traffic signal trial currently in progress.

Consider whether right turn conflicts at Totteridge Lane might be due to confusion or deliberate action. Consider whether signage or timing adjustment could reduce confusion. Liaise with Police regarding enforcement at this location if appropriate.

Keep accidents in darkness under review pending expected street lighting renewal in next couple of years.

Cluster 4
WOODHOUSE ROAD J/W COLNEY HATCH LANE

16 personal injury accidents occurred at this location in the three years 01/10/2008 – 30/09/2011

1 accident resulted in serious injury
15 accidents resulted in slight injury only

Contributory factors assigned as likely or possible (not all factors included)

1 aggressive driving
1 travelling too fast for the conditions
1 other (passenger fell on bus)
1 driver/rider illness or disability, mental or physical
1 exceeding the speed limit
3 following too close and/or sudden braking
1 other (child passenger opened door while vehicle moving)
1 pedestrian crossed the road masked by stationary or parked vehicle
1 loss of control
2 disobeyed traffic signal

Accident patterns

4 shunts – 3 of which NE-bound
3 pedestrian accidents, 2 involving a NE-bound vehicle in collision with a SE-bound pedestrian at the j/w Horsham Avenue.
2 collisions between S-bound and SW-bound vehicles involving a vehicle disobeying the traffic signals (different approaches – 1 cyclist)
2 reversing accidents – 1 involving driver illness – different approaches/circumstances.
1 vehicle failing to squeeze between oncoming vehicle and parked vehicle, 1 right turn across path of oncoming vehicle, 1 fall on bus, 1 mid junction collision between cycle and bus both waiting to turn right in same direction, 1 child passenger fell from vehicle

Accident conditions and vehicle involvement are all broadly average except bus involvement (25% v borough road average of 7%) which probably reflects level of bus movement at this location.

High proportion of NE-bound accidents (shunts and pedestrian accidents).

Possible Action:

This is a busy area on the approach to the signals and options to address this are likely to be limited – nevertheless review visibility/conditions/queuing for NE-bound vehicles approaching junction.

Cluster 15
HIGH STREET J/W MEADWAY

11 personal injury accidents occurred at this location in the three years 01/10/2008 – 30/09/2011

1 accident resulted in serious injury
10 accidents resulted in slight injury only

Contributory factors assigned as likely or possible (not all factors included)

1 aggressive driving
1 travelling too fast for the conditions
3 following too close and/or sudden braking
1 junction overshoot
1 loss of control
2 wrong use of pedestrian crossing facility
2 passing too close to cyclist, horse rider or pedestrian
1 inexperienced or learner driver/rider

Accident patterns

5 pedestrian accidents (2 SE-bound vehicle, 3 NW-bound vehicle)
3 shunts involving SE-bound vehicles
1 lane change SE-bound, 1 vehicle pulled out in front of cyclist, 1 left turning lorry crushed front of car

High pedestrian accident involvement (mainly adults during day and early evening on a weekday). 45% v 25% borough average. High pedestrian activity.

Possible Action:

Review signal visibility (could high-mast signal pole be better sited?) / visibility to waiting pedestrians / lane markings / warning and direction signs / length of time pedestrians have to wait (long wait may contribute to misuse of crossing)

Cluster 21
BARNET HILL J/W UNDERHILL

10 personal injury accidents occurred at this location in the three years 01/10/2008 – 30/09/2011

3 accidents resulted in serious injury

7 accidents resulted in slight injury only

Contributory factors assigned as likely or possible (not all factors included)

1 disobeyed give way or stop sign or markings

1 sudden braking

2 passing too close to cyclist, horse rider or pedestrian

1 other (passenger fell on bus)

Accident patterns

3 right turn from SE-bound A1000 across path of oncoming vehicle

2 passenger(s) injured on bus when it braked/moved off

2 pedestrian accidents at the junction with Fairfield Road, (1 crossing mouth of junction, 1 crossing A1000)

1 right turn out of Fairfield Road across the path of a NW-bound vehicle

2 overtaking accidents (1 bus passing too close to cyclist, 1 vehicle passing too close to bus driver stood beside vehicle).

40% of accidents on a wet road surface is twice the borough road average.

40% involve people over 60 (compared with 14% average) – injuries to bus passengers contributing

40% involve a bus or coach (compared with 7% average) – but little commonality in accidents

40% in darkness (compared with 27% average – probably chance)

Possible Action:

Review drainage, road surface and skid resistance with view to improving drainage and/or provide improved/high friction surfacing if necessary – works possibly in conjunction with Dollis Valley estate regeneration.

Cluster 22
HIGH STREET J/W WOOD STREET

10 personal injury accidents occurred at this location in the three years 01/10/2008 – 30/09/2011

0 accidents resulted in serious injury
10 accidents resulted in slight injury only

Contributory factors assigned as likely or possible (not all factors included)

1 crossed road masked by stationary or parked vehicle
1 wrong use of pedestrian crossing facility
1 distraction in vehicle
2 following too close / sudden braking
1 distraction outside vehicle

Accident patterns

4 pedestrian accidents all NW-bound vehicles (one 50m west of junction)
2 E-bound shunts at junction, 1 SE bound shunt on High Street
1 vehicle turned left (out of side road?) into path of NW-bound vehicle, 1 NW-bound vehicle distracted and drove into street furniture, 1 passengers fell when NW-bound bus braked sharply at crossing.

High pedestrian accidents 40% v 25% borough average. High pedestrian activity.

Possible Action:

Investigate alternative method of control and decluttering.

Cluster 25
HADLEY GREEN J/W HIGH STREET

10 personal injury accidents occurred at this location in the three years 01/10/2008 – 30/09/2011

1 accident resulted in serious injury
9 accidents resulted in slight injury only

Contributory factors assigned as likely or possible (not all factors included)

1 other (oversteer)
1 passing too close to cyclist, horse rider or pedestrian
1 failed to signal / misleading signal
1 following too close
1 loss of control
1 distraction in vehicle / distraction outside vehicle
1 disobeyed traffic signal

Accident patterns

3 pedestrians crossing road – 3 different locations (2 at junction)
2 pedestrians on pavement hit by vehicle (1 bus S of junction – poss pulling in at stop, 1 van north of junction)
2 shunts (different directions)
1 lane change, 1 oversteer on left turn, 1 U turn

50% pedestrian accidents – twice the borough average – high pedestrian activity and no pattern to accidents.

Higher than average child accidents – 2 pedestrians on pavement, 1 young child crossing (almost certainly accompanied). 1 car occupant.

Possible Action:

Consider whether visibility to signals NW-bound at St Albans Road can be improved. Otherwise keep under review

APPENDIX 3

Contributory factors recorded across all clusters of seven or more accidents in a radius of 50m on borough roads (three years to 30/09/2011)

	Description	% by Accidents
Driver/Rider	Failed to look properly	60.90
Driver/Rider	Failed to judge other persons path or speed	29.93
Driver/Rider	Careless/Reckless/In a hurry	21.45
Pedestrian	Failed to look properly	19.72
Driver/Rider	Poor turn or manoeuvre	13.49
Pedestrian	Careless/Reckless/In a hurry	9.52
Driver/Rider	Following too close	9.00
Pedestrian	Failed to judge vehicles path or speed	8.65
Driver/Rider	Sudden braking	8.30
Driver/Rider	Travelling too fast for conditions	7.09
Driver/Rider	Loss of control	6.40
Driver/Rider	Disobeyed automatic traffic signal	5.54
Pedestrian	Crossed road masked by stationary or parked veh	4.84
Driver/Rider	Disobeyed Give Way or Stop sign or markings	4.84
Driver/Rider	Stationary or parked vehicle	4.15
	Other	3.98
Driver/Rider	Passing too close to cyclist, horse rider or pedestrian	3.98
Driver/Rider	Junction overshoot	3.81
Driver/Rider	Aggressive driving	2.94
Driver/Rider	Swerved	2.77
Driver/Rider	Exceeding speed limit	2.77
Driver/Rider	Junction restart	2.60
Pedestrian	Wrong use of pedestrian crossing facility	2.25
	Slippery road (due to weather)	2.25
	Emergency vehicle on call	1.73
Pedestrian	Impaired by alcohol	1.73
Driver/Rider	Nervous/Uncertain/Panic	1.56
Driver/Rider	Disobeyed pedestrian crossing facility	1.38
	Vehicle door opened or closed negligently	1.04
Driver/Rider	Distraction in vehicle	1.04
Driver/Rider	Impaired by alcohol	0.87
	Defective traffic signals	0.87
Pedestrian	Dangerous action in carriageway (eg playing)	0.69
Driver/Rider	Dazzling sun	0.69
Driver/Rider	Illness or disability, mental or physical	0.35
Pedestrian	Pedestrian wearing dark clothing at night	0.35
Pedestrian	Disability or illness, mental or physical	0.35
Driver/Rider	Fatigue	0.35
	Poor or defective road surface	0.17
	Defective brakes	0.17