

# **PERSONAL INJURY ACCIDENTS IN LEEDS**

## **LENGTHS FOR CONCERN**

**2006 – 2010**

October 2011



**Leeds**  
CITY COUNCIL

**CITY DEVELOPMENT DEPARTMENT**

**Martin Farrington, Director**

# **PERSONAL INJURY ACCIDENTS IN LEEDS**

## **LENGTHS FOR CONCERN (2006 - 2010)**

October 2011

Prepared by Accident Studies Unit

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# **ANALYSIS OF PERSONAL INJURY ACCIDENTS ON LENGTHS OF ROAD IN LEEDS DISTRICT 2006 - 2010**

## **Methodology and Recommendations**

### **1.0 Introduction**

- 1.1 This report has been undertaken with the specific objective of identifying those lengths of road within the Leeds Metropolitan District which have an accident rate at or above that expected when compared to the National rates for similar classes of road. It has been prepared as the result of a systematic analysis of the personal injury accidents which occurred on lengths of road within the Leeds Metropolitan District during the five year period 2006 - 2010. The report gives recommendations regarding those lengths where remedial treatment is likely to result in a cost-effective casualty reduction scheme. It therefore represents a companion edition to the Sites for Concern report, which identifies junctions with significant levels of accidents and it is anticipated that it will provide valuable information to all those agencies involved in casualty reduction.
- 1.2 In particular the information in this report will be used to identify casualty groups that figure most prominently in Leeds City Council's casualty reduction targets, e.g. high severity accidents and those involving pedestrians.
- 1.3 "The recommendations made in this report are co-ordinated with the work being done on both road safety cameras and traffic calming."

## 2.0 **Background**

- 2.1 The identification and ranking of lengths of road with accident problems is a far more complex process than that required to identify clusters at individual sites. One common way of producing an initial list is the sub-division of all roads within an area into equal lengths, usually 1 km. These can then be ranked in gross order of accidents, or accidents per 100 million vehicle kilometres, to obtain a sub-set which may be worthy of further study. This technique, however, takes no account of the local characteristics of the road and in many cases reduces the list to merely a function of how many junctions or site specific accident clusters there are within any specified length.
- 2.2 The methodology chosen to identify lengths needs to take into account some of the local characteristics of the roads and hence will not necessarily compare roads of equal length. The listings also need to take account of different levels of usage and differentiate between lengths in rural situations and those in urban areas.
- 2.3 In this context, roads with a speed limit of 30 or 40 mph are classed as urban, whilst those with a limit of above 40 mph are considered to be rural.

## 3.0 **Methodology**

- 3.1 In order to confirm the accuracy of the information supplied by West Yorkshire Police regarding the locations of personal injury accidents occurring in the Leeds District, a computer based mapping system is maintained. This provides an immediate visual record of the exact location of all reported injury accidents
- 3.2 Using this computerised plot, an inspection was carried out for the whole district and those lengths of road which appeared to have a significant number of accidents were noted.
- 3.3 Previous experience has shown that this approach tends to place undue emphasis on lengths in urban areas, so in order to ensure that rural roads were fully represented, a separate exercise was carried out in order to identify all potential lengths outside the urban area.
- 3.4 Also included at this stage were any lengths which had been previously recorded for other reasons, e.g. past accident problem, recent change in usage, scheme monitoring, etc.

- 3.5 An examination was then carried out to ensure that in the local context a "sensible" length had been selected. This means ensuring that, in general terms, conditions along the whole length are consistent and that the end points are selected on some readily identified features, e.g. the terminal points of speed restrictions, not simply where the majority of accidents were recorded.
- 3.6 Further restrictions have also been placed upon the choice of lengths to ensure that the lengths finally selected on the grounds of a high accident rate actually do have the accidents spread along the length. These restrictions are that:-
  - a) No length is selected which has had less than 10 injury accidents in the past 5 years (This also provides consistency with the junction listings).
  - b) No length is selected which has more than 60% of its accidents at one or two specific junctions on its length.
- 3.7 Once the lengths had been identified, the actual length (in kms) and the annual average daily traffic flows (AADT) were obtained. From this information the accident rate per million vehicle kilometres (MVK) was then calculated.
- 3.8 The accident rate of each length was compared with average value quoted in Road Casualties Great Britain 2009 for that class of road. The lengths were then ranked with respect to the degree by which each exceeded its own expected value.
- 3.9 In addition, attention was paid to the percentage levels of certain parameters within the accident details (e.g. severity ratio, pedestrian involvement and darkness accidents), these were then compared with the district and county averages.
- 3.10 The location of each accident was then plotted and stick diagrams produced to assist with the analysis.

#### 4.0 Results

- 4.1 A full list of all those lengths meeting the criteria identified in Section 3 is given in Table 1. The lengths are ranked in order of the percentage by which they exceed the average accident rate for a road of that class.
- 4.2 Table 2 shows where work has been carried out recently, is programmed, or where action is recommended.
- 4.3 For each identified length, a detailed synopsis of the accident history is presented, together with any comments.
- 4.4 A total of 67 lengths of road meet the specified criteria.
- 4.5 Seven lengths have been identified where the accident rate is more than three times that expected. Since 2006, remedial treatment has been recently carried out on three of these lengths, and works are programmed on the other four.

#### 5.0 Motorways and A1

- 5.1 For comparison purposes the accident rates have been calculated for the total lengths of the M1, M62, M621 and A1 which lie within Leeds District, but are the direct responsibility of the Highways Agency.
- 5.2 In terms of accidents per 100 million vehicle kilometres, the rates over the 5 year period 2006 - 2010 are:-

M1	8 accs/100MVK
M62	8 accs/100MVK
M621	9 accs/100MVK
A1	4 accs/100MVK

- 5.3 The National average accident rate for Motorways is 8 accs/100MVK\*, with no distinction being made between differing speed limits. The M621 now acts as the motorway link to the city centre from the south east, as well as the south west, following the opening of the M1/A1 link. The M1 has similarly been extended, and now links with the A1(M) at Hook Moor. Further analysis will be required before a true picture of accident levels can be determined.

\* DfT: Road Casualties Great Britain 2009; Table 3

## 6.0 **Conclusions**

- 6.1 Remedial treatment has been carried out on 44 of the lengths listed in Table 2, and the situation is now being monitored for the purpose of assessing the benefits.
- 6.2 Remedial action is currently programmed on 18 lengths.
- 6.3 Common factors have been identified on 6 lengths, allowing recommendations for remedial treatment to be made.
- 6.4 A high proportion of the very worst lengths are “shopping streets.” Consideration should be given to a programme of treating the problems, possibly by means of 20mph speed limits.

**Table 1**

**Leeds Lengths of Road 2011**

Rank	Length of Road	Severity					A c c i d e n t s					Rate / 100MVK	UK Norm	% of Norm	Reference	
		Ratio%	Wet%	Dark%	Ped%	Skid%	2006	2007	2008	2009	2010					Total
1	Harehills Road, Harehills	6%	29%	27%	33%	10%	14	10	4	12	12	52	293	51	575	LLR058
2	Armley Town Street, Armley	20%	20%	0%	30%	20%	2	2	4	1	1	10	217	51	425	LLR142
3	Harehills Lane, Harehills	8%	26%	26%	44%	10%	7	8	7	8	9	39	203	51	398	LLR015
4	Austhorpe Road, Cross Gates	24%	12%	12%	47%	0%	4	3	3	5	2	17	173	51	339	LLR030
5	Woodhouse Lane, Woodhouse	17%	35%	35%	48%	10%	8	8	15	10	7	48	184	56	329	LLR067
6	Roundhay Road, Harehills	7%	27%	27%	27%	2%	14	6	7	9	5	41	176	56	314	LLR121
7	Gelder Road, Gildersome	37%	26%	21%	11%	63%	6	5	3	0	5	19	61	20	305	LLR057
8	Richardshaw Lane, Pudsey	0%	25%	13%	44%	6%	4	3	4	3	2	16	152	51	298	LLR035
9	Cardigan Road, Headingley	10%	18%	29%	21%	8%	21	9	11	9	12	62	150	51	294	LLR031
10	Burley Road, Burley	6%	24%	24%	27%	15%	10	6	8	4	5	33	144	51	282	LLR026
11	Main Street, Garforth	25%	17%	17%	75%	8%	1	2	2	2	5	12	143	51	280	LLR042
12	Spencer Place, Harehills	20%	30%	20%	10%	10%	0	2	1	3	4	10	137	51	269	LLR016
13	Lowtown, Pudsey	20%	8%	20%	40%	0%	7	7	5	2	4	25	135	51	265	LLR024
14	Swinnow Road, Swinnow	28%	16%	40%	32%	20%	5	6	3	5	6	25	135	51	265	LLR126
15	Calverley Lane / Old Road / Town Street, Farsley	0%	42%	17%	33%	8%	2	4	0	5	1	12	134	51	263	LLR006
16	Stainbeck Road, Meanwood	15%	27%	23%	12%	15%	5	7	4	6	4	26	134	51	263	LLR129
17	Kirkstall Road, Kirkstall	20%	31%	29%	13%	2%	15	11	15	7	7	55	145	56	259	LLR025
18	Lower Town Street, Bramley	0%	32%	14%	14%	0%	5	8	0	4	5	22	142	56	254	LLR080
19	Nippet Lane / Compton Road / Stoney Rock Lane, Burm:	6%	29%	23%	29%	0%	4	10	7	7	7	35	126	51	247	LLR085
20	Wakefield Road, Swillington	28%	17%	17%	0%	17%	4	3	2	3	6	18	48	20	240	LLR012
21	Harehills Lane, Burmantofts	17%	30%	48%	30%	17%	9	5	1	3	5	23	120	51	235	LLR009
22	Pepper Road / Sussex Avenue, Hunslet Carr	25%	17%	33%	8%	17%	5	2	2	2	1	12	119	51	233	LLR132
23	Chapelton Road, Harehills	13%	25%	30%	21%	11%	14	17	13	12	7	63	119	51	233	LLR056
24	Robin Lane / Littlemoor Road, Pudsey	16%	37%	21%	26%	11%	2	4	3	5	5	19	117	51	229	LLR100
25	Hough Lane, Bramley	18%	36%	36%	18%	9%	3	2	4	1	1	11	114	51	224	LLR139
26	Chapel Street / Cross Green Lane / Green Lane, Cross C	15%	31%	23%	46%	15%	2	2	4	4	1	13	113	51	222	LLR120
27	Kirkstall Hill, Kirkstall	44%	25%	44%	25%	13%	5	3	6	0	2	16	112	51	220	LLR101
28	East Chevin Road / Otley Old Road, East Chevin	20%	20%	20%	5%	50%	4	3	4	6	3	20	76	35	217	LLR137
29	Headingley Lane, Headingley	12%	27%	20%	10%	2%	7	12	12	10	8	49	116	56	207	LLR066
30	Street Lane, Moortown	12%	24%	29%	25%	8%	15	8	16	9	11	59	103	51	202	LLR105
31	Henconner Lane, Bramley	21%	43%	36%	36%	29%	3	2	3	4	2	14	98	51	192	LLR115
32	Middleton Park Avenue, Middleton	15%	15%	23%	31%	31%	3	3	2	2	3	13	97	51	190	LLR023
33	Armley Ridge Road / Cockshott Lane, Upper Armley	24%	48%	43%	24%	10%	3	4	1	6	8	22	96	51	188	LLR099
34	Broad Lane, Sandford	22%	52%	26%	9%	30%	6	7	4	3	3	23	94	51	184	LLR098
35	South Parkway, Seacroft	21%	29%	21%	43%	29%	3	1	5	4	1	14	89	51	175	LLR108
36	Preston Lane / Leeds Road / Station Road, Allerton Byw:	14%	32%	27%	9%	23%	7	4	5	3	3	22	87	51	171	LLR083

**Table 1**

**Leeds Lengths of Road 2011**

Rank	Length of Road	Severity					A c c i d e n t s					Rate / 100MVK	UK Norm	% of Norm	Reference	
		Ratio%	Wet%	Dark%	Ped%	Skid%	2006	2007	2008	2009	2010					Total
37	Mill Lane / Hillings Lane, Hawksworth	27%	36%	36%	0%	36%	3	2	2	3	1	11	58	35	166	LLR018
38	Green Hill Road / Hill Top Road / Whingate, Armley	7%	40%	20%	7%	7%	5	4	4	1	1	15	81	51	159	LLR124
39	Lupton Avenue, Burmantofts	8%	23%	8%	31%	0%	4	4	2	0	3	13	78	51	153	LLR032
40	Drighlington By Pass, Drighlington	31%	42%	23%	0%	46%	10	4	4	4	4	26	30	20	150	LLR140
41	Town Street / Scott Green, Gildersome	0%	42%	42%	8%	0%	3	1	3	3	2	12	75	51	147	LLR063
42	Belle Isle Road, Belle Isle	14%	32%	32%	25%	11%	6	7	9	4	2	28	74	51	145	LLR010
43	Stanningley Bypass, Stanningley	17%	49%	27%	5%	44%	18	13	8	13	11	63	29	20	145	LLR045
44	Stanningley Road, Bramley	17%	17%	33%	25%	8%	2	7	0	3	0	12	72	51	141	LLR011
45	Easterly Road, Gipton Wood	22%	50%	41%	16%	16%	8	9	4	7	4	32	79	56	141	LLR145
46	North Parkway, Seacroft	13%	33%	40%	13%	13%	3	2	5	3	2	15	71	51	139	LLR112
47	Bradford Road, Stanningley	29%	35%	18%	6%	24%	2	8	1	3	3	17	71	51	139	LLR064
48	King Lane, Alwoodley	15%	32%	26%	12%	21%	6	8	8	8	4	34	68	51	133	LLR138
49	Leeds Road, Kippax	18%	18%	29%	24%	12%	4	1	2	5	5	17	67	51	131	LLR082
50	Aberford Road, Oulton	19%	23%	19%	8%	12%	7	7	5	6	1	26	72	56	129	LLR065
51	Main Street / Fall Lane / Stanhope Road, East Ardsley	20%	30%	20%	10%	20%	3	3	1	1	2	10	65	51	127	LLR135
52	Town Street, Middleton	27%	18%	27%	18%	9%	4	1	2	2	2	11	65	51	127	LLR028
53	Arthington Lane / Otley Road, Arthington	40%	20%	50%	0%	50%	3	0	2	4	1	10	24	20	120	LLR134
54	Ring Road, Farsley	7%	26%	11%	4%	19%	8	5	3	8	3	27	24	20	120	LLR062
55	Tong Road, Wortley	16%	24%	24%	24%	0%	5	7	6	1	6	25	59	51	116	LLR008
56	Barwick Road, Stanks	10%	40%	20%	20%	0%	1	1	2	2	4	10	58	51	114	LLR021
57	Thorpe Lane / Middleton Lane, Thorpe	38%	23%	31%	31%	31%	1	3	3	5	1	13	64	56	114	LLR088
58	Queensway, Yeadon	12%	41%	47%	24%	12%	3	4	3	4	3	17	58	51	114	LLR075
59	Stonegate Road, Meanwood	9%	23%	17%	17%	11%	9	6	10	4	6	35	57	51	112	LLR128
60	Morris Lane / Spen Lane, Kirkstall	17%	33%	22%	11%	11%	3	2	4	3	6	18	56	51	110	LLR071
61	Queenswood Drive, Kirkstall	22%	44%	44%	22%	6%	5	4	4	3	2	18	56	51	110	LLR087
62	Bayton Lane, Horsforth	27%	45%	64%	9%	55%	3	3	1	2	2	11	38	35	109	LLR007
63	Brownberrie Lane, Horsforth	20%	40%	60%	30%	20%	2	2	3	0	3	10	55	51	108	LLR117
64	Otley Road, Golden Acre Park	33%	42%	42%	17%	17%	3	2	3	4	0	12	21	20	105	LLR048
65	Roman Ridge, Ledston	50%	8%	33%	0%	8%	2	4	3	1	2	12	21	20	105	LLR054
66	Harrogate Road, Moor Allerton	15%	24%	18%	15%	9%	6	8	9	5	5	33	59	56	105	LLR116
67	Middleton Park Road, Middleton	41%	29%	29%	18%	29%	3	4	1	6	3	17	51	51	100	LLR005

Table 2

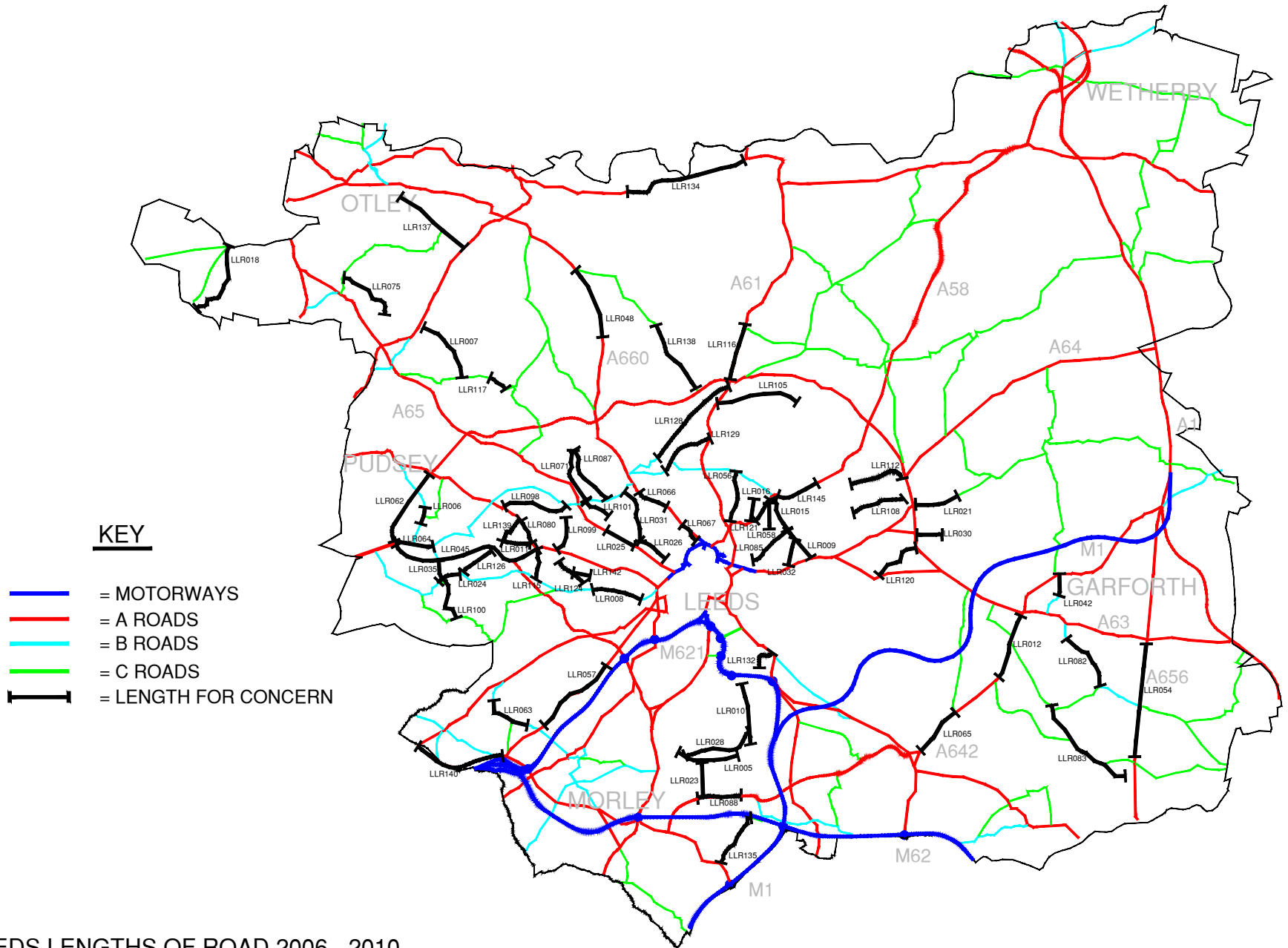
## Leeds Lengths of Road 2011

Rank	Length of Road	A c c i d e n t s					Rate / 100MVK	UK Norm	% of Norm	Reference	Action Since 2006	Action programmed	Action recommended	Study recommended	Monitoring only
		2006	2007	2008	2009	2010									
		1	Harehills Road, Harehills	14	10	4	12	12	52	293	51	575	LLR058		✓
2	Armley Town Street, Armley	2	2	4	1	1	10	217	51	425	LLR142	✓			
3	Harehills Lane, Harehills	7	8	7	8	9	39	203	51	398	LLR015		✓		
4	Austhorpe Road, Cross Gates	4	3	3	5	2	17	173	51	339	LLR030	✓	✓		
5	Woodhouse Lane, Woodhouse	8	8	15	10	7	48	184	56	329	LLR067		✓		
6	Roundhay Road, Harehills	14	6	7	9	5	41	176	56	314	LLR121		✓		
7	Gelder Road, Gildersome	6	5	3	0	5	19	61	20	305	LLR057	✓			
8	Richardshaw Lane, Pudsey	4	3	4	3	2	16	152	51	298	LLR035	✓			
9	Cardigan Road, Headingley	21	9	11	9	12	62	150	51	294	LLR031	✓			
10	Burley Road, Burley	10	6	8	4	5	33	144	51	282	LLR026	✓		✓	
11	Main Street, Garforth	1	2	2	2	5	12	143	51	280	LLR042	✓	✓		
12	Spencer Place, Harehills	0	2	1	3	4	10	137	51	269	LLR016		✓		
13	Lowtown, Pudsey	7	7	5	2	4	25	135	51	265	LLR024	✓	✓		
14	Swinnow Road, Swinnow	5	6	3	5	6	25	135	51	265	LLR126	✓			
15	Calverley Lane / Old Road / Town Street, Farsley	2	4	0	5	1	12	134	51	263	LLR006	✓			
16	Stainbeck Road, Meanwood	5	7	4	6	4	26	134	51	263	LLR129	✓			
17	Kirkstall Road, Kirkstall	15	11	15	7	7	55	145	56	259	LLR025	✓			
18	Lower Town Street, Bramley	5	8	0	4	5	22	142	56	254	LLR080				✓
19	Nippet La / Compton Rd / Stoney Rock La, Burmantofts	4	10	7	7	7	35	126	51	247	LLR085				✓
20	Wakefield Road, Swillington	4	3	2	3	6	18	48	20	240	LLR012		✓		
21	Harehills Lane, Burmantofts	9	5	1	3	5	23	120	51	235	LLR009	✓			
22	Pepper Road / Sussex Avenue, Hunslet Carr	5	2	2	2	1	12	119	51	233	LLR132	✓			
23	Chapeltown Road, Harehills	14	17	13	12	7	63	119	51	233	LLR056	✓			
24	Robin Lane / Littlemoor Road, Pudsey	2	4	3	5	5	19	117	51	229	LLR100	✓			
25	Hough Lane, Bramley	3	2	4	1	1	11	114	51	224	LLR139	✓			
26	Chapel Street / (Cross) Green Lane / Cross Gates	2	2	4	4	1	13	113	51	222	LLR120	✓			
27	Kirkstall Hill, Kirkstall	5	3	6	0	2	16	112	51	220	LLR101	✓			
28	East Chevin Road / Otley Old Road, East Chevin	4	3	4	6	3	20	76	35	217	LLR137			✓	
29	Headingley Lane, Headingley	7	12	12	10	8	49	116	56	207	LLR066		✓		
30	Street Lane, Moortown	15	8	16	9	11	59	103	51	202	LLR105	✓			
31	Henconner Lane, Bramley	3	2	3	4	2	14	98	51	192	LLR115	✓	✓		
32	Middleton Park Avenue, Middleton	3	3	2	2	3	13	97	51	190	LLR023	✓			
33	Armley Ridge Road / Cockshott Lane, Upper Armley	3	4	1	6	8	22	96	51	188	LLR099	✓	✓		
34	Broad Lane, Sandford	6	7	4	3	3	23	94	51	184	LLR098	✓			
35	South Parkway, Seacroft	3	1	5	4	1	14	89	51	175	LLR108	✓	✓		
36	Preston La / Leeds Rd / Station Rd, Allerton Bywater	7	4	5	3	3	22	87	51	171	LLR083			✓	
37	Mill Lane / Hillings Lane, Hawksworth	3	2	2	3	1	11	58	35	166	LLR018	✓			
38	Green Hill Road / Hill Top Road / Whingate, Armley	5	4	4	1	1	15	81	51	159	LLR124	✓			
39	Lupton Avenue, Burmantofts	4	4	2	0	3	13	78	51	153	LLR032				✓
40	Drighlington By Pass, Drighlington	10	4	4	4	4	26	30	20	150	LLR140	✓			
41	Town Street / Scott Green, Gildersome	3	1	3	3	2	12	75	51	147	LLR063			✓	

Table 2

## Leeds Lengths of Road 2011

Rank	Length of Road	A c c i d e n t s						Rate /	UK	% of	Reference	Action Since	Action	Action	Study	Monitoring
		2006	2007	2008	2009	2010	Total	100MVK	Norm	Norm		2006	programmed	recommended	recommended	only
42	Belle Isle Road, Belle Isle	6	7	9	4	2	28	74	51	145	LLR010	✓				
43	Stanningley Bypass, Stanningley	18	13	8	13	11	63	29	20	145	LLR045		✓			
44	Stanningley Road, Bramley	2	7	0	3	0	12	72	51	141	LLR011		✓			
45	Easterly Road, Gipton Wood	8	9	4	7	4	32	79	56	141	LLR145	✓				
46	North Parkway, Seacroft	3	2	5	3	2	15	71	51	139	LLR112	✓				
47	Bradford Road, Stanningley	2	8	1	3	3	17	71	51	139	LLR064	✓				
48	King Lane, Alwoodley	6	8	8	8	4	34	68	51	133	LLR138	✓				
49	Leeds Road, Kippax	4	1	2	5	5	17	67	51	131	LLR082	✓				
50	Aberford Road, Oulton	7	7	5	6	1	26	72	56	129	LLR065	✓				
51	Main Street / Fall Lane / Stanhope Road, East Ardsley	3	3	1	1	2	10	65	51	127	LLR135	✓				
52	Town Street, Middleton	4	1	2	2	2	11	65	51	127	LLR028					✓
53	Arthington Lane / Otley Road, Arthington	3	0	2	4	1	10	24	20	120	LLR134	✓				
54	Ring Road, Farsley	8	5	3	8	3	27	24	20	120	LLR062		✓			
55	Tong Road, Wortley	5	7	6	1	6	25	59	51	116	LLR008	✓				
56	Barwick Road, Stanks	1	1	2	2	4	10	58	51	114	LLR021					✓
57	Thorpe Lane / Middleton Lane, Thorpe	1	3	3	5	1	13	64	56	114	LLR088					✓
58	Queensway, Yeadon	3	4	3	4	3	17	58	51	114	LLR075			✓		
59	Stonegate Road, Meanwood	9	6	10	4	6	35	57	51	112	LLR128	✓				
60	Morris Lane / Spen Lane, Kirkstall	3	2	4	3	6	18	56	51	110	LLR071					✓
61	Queenswood Drive, Kirkstall	5	4	4	3	2	18	56	51	110	LLR087	✓	✓			
62	Bayton Lane, Horsforth	3	3	1	2	2	11	38	35	109	LLR007	✓				
63	Brownberrie Lane, Horsforth	2	2	3	0	3	10	55	51	108	LLR117	✓				
64	Otley Road, Golden Acre Park	3	2	3	4	0	12	21	20	105	LLR048		✓			
65	Roman Ridge, Ledston	2	4	3	1	2	12	21	20	105	LLR054	✓				
66	Harrogate Road, Moor Allerton	6	8	9	5	5	33	59	56	105	LLR116	✓				
67	Middleton Park Road, Middleton	3	4	1	6	3	17	51	51	100	LLR005			✓		



**KEY**

- = MOTORWAYS
- = A ROADS
- = B ROADS
- = C ROADS
- = LENGTH FOR CONCERN

LEEDS LENGTHS OF ROAD 2006 - 2010

## Index to Lengths of Road plan

LLR005 - Middleton Park Road	LLR124 - Green Hill Road / Hill Top (Road) / Whingate
LLR006 - Calverley Lane / Old Road /Town Street	LLR126 - Swinnow Road
LLR007 - Bayton Lane	LLR128 - Stonegate Road
LLR008 - Tong Road	LLR129 - Stainbeck Road
LLR009 - Harehills Lane	LLR132 - Pepper Road / Sussex Avenue
LLR010 - Belle Isle Road	LLR134 - Arthington Lane
LLR011 - Stanningley Road	LLR135 - Main Street / Fall Lane / Stanhope Road
LLR012 - Wakefield Road	LLR137 - East Chevin Road / Otley Old Road
LLR015 - Harehills Lane	LLR138 - King Lane
LLR016 - Spencer Place	LLR139 - Hough Lane
LLR018 - Hillings Lane / Mill Lane	LLR140 - Drighlington By Pass
LLR021 - Barwick Road	LLR142 - Town Street
LLR023 - Middleton Park Avenue	LLR145 - Easterly Road
LLR024 - Lowtown	
LLR025 - Kirkstall Road	
LLR026 - Burley Road	
LLR028 - Town Street	
LLR030 - Austhorpe Road	
LLR031 - Cardigan Road	
LLR032 - Lupton Avenue	
LLR035 - Richardshaw Lane	
LLR042 - Main Street	
LLR045 - Stanningley Bypass	
LLR048 - Otley Road	
LLR054 - Roman Ridge	
LLR056 - Chapeltown Road	
LLR057 - Gelderd Road	
LLR058 - Harehills Road	
LLR062 - Ring Road Farsley	
LLR063 - Town Street / Scott Green	
LLR064 - Bradford Road	
LLR065 - Aberford Road	
LLR066 - Headingley Lane	
LLR067 - Woodhouse Lane	
LLR071 - Morris Lane / Spen Lane	
LLR075 - Queensway	
LLR080 - Lower Town Street	
LLR082 - Leeds Road	
LLR083 - Preston Lane / Leeds Road / Station Road	
LLR085 - Compton Road / Nippet Lane / Stoney Rock Lane	
LLR087 - Queenswood Drive	
LLR088 - Thorpe Lane / Middleton Lane	
LLR098 - Broad Lane	
LLR099 - Armley Ridge Road / Cockshott Lane	
LLR100 - Littlemoor Road / Robin Lane	
LLR101 - Kirkstall Hill	
LLR105 - Street Lane	
LLR108 - South Parkway	
LLR112 - North Parkway	
LLR115 - Henconner Lane	
LLR116 - Harrogate Road	
LLR117 - Brownberrie Lane	
LLR120 - Chapel Street / Cross Green Lane / Green Lane	
LLR121 - Roundhay Road	

***Harehills Road***  
***Nice View to Ashley Road, Harehills***

**Ref No. : LLR058 Rank this year : 1 (last : 1 ) Grid Ref: 431900 / 455200**

**Urban B road Length (Km) : 0.78 Flow (AADT): 13670**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	13	1	0	<b>14</b>
	2007	10	0	0	<b>10</b>
	2008	4	0	0	<b>4</b>
	2009	12	0	0	<b>12</b>
	2010	10	2	0	<b>12</b>
	<b>Total</b>	<b>49</b>	<b>3</b>	<b>0</b>	<b>52</b>

**Accident Rates (100MVkm) Road Rate : 293 National Rate : 51 % of Norm : 575**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>6</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>29</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>27</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>33</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>10</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Twenty four of the accidents involved vehicles emerging from minor roads into the path of main road traffic. Seventeen of the accidents involved pedestrians, 5 of whom were children. The remaining accidents included a variety of types, all of which occurred in low numbers. The accidents are distributed along the length, with no sign of site specific clustering.

**Recommendations**

A package of traffic management measures, including carriageway markings, red surfacing, footway build-outs, projected give way lines from side roads and central pedestrian refuges was completed in early 2005. The feasibility of a further scheme is to be considered as part of this year's works programme.

***Armley Town Street***  
***Hill Top Rd / Whingate to Armley Ridge Rd / Wortley Rd, Armley***

**Ref No. : LLR142    Rank this year : 2 (last : 2 )    Grid Ref: 426360 / 433549**

**Urban B road                      Length (Km) : 0.5    Flow (AADT): 5520**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	1	1	0	2
	2007	2	0	0	2
	2008	4	0	0	4
	2009	0	1	0	1
	2010	1	0	0	1
	<b>Total</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>

**Accident Rates (100MVkm)    Road Rate : 217    National Rate : 51    % of Norm : 425**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>20</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>20</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>0</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>30</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>20</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Five of the accidents involved vehicles emerging from minor roads into the path of main road traffic. Three of the accidents involved pedestrians, all 3 of whom were children and were masked by parked vehicles at the time of the accident. The remaining accidents were disparate types.

**Recommendations**

A traffic calming scheme, which involved introducing three speed tables and associated lining works has recently been completed. Close monitoring of this scheme will be maintained.

***B6159 Harehills Lane***  
***Fforde Grene to Compton Road, Harehills***

**Ref No. : LLR015    Rank this year : 3 (last : 4 )    Grid Ref: 432100 / 435300**

**Urban B road                      Length (Km) : 1    Flow (AADT): 11500**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	6	1	0	7
	2007	7	1	0	8
	2008	7	0	0	7
	2009	8	0	0	8
	2010	8	1	0	9
	<b>Total</b>	<b>36</b>	<b>3</b>	<b>0</b>	<b>39</b>

**Accident Rates (100MVkm)    Road Rate : 203    National Rate : 51    % of Norm : 398**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>8</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>26</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>26</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>44</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>10</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Historically the accidents on this length of road have been dominated by those involving pedestrians. This remains the case, with 17 of the accidents in the current period being of this type. Seven of the casualties were children and 6 were masked to the vehicles which hit them. Eight of the pedestrian accidents were distributed along a 175 metre stretch at the southern extent of the length, where local shops are located. Eight of the accidents involved vehicles emerging from minor roads into the path of main road traffic and 5 were nose to tail collisions. The remaining accidents were comprised of various types, all of which occurred in low numbers.

**Recommendations**

The opening of a new supermarket development between Berkeley Road and Chatsworth Road has provided some pedestrian provision and a further crossing in the vicinity of the junction with Sandhurst Place is included in the current pedestrian crossing review. The feasibility of a traffic scheme for the length will be included in the current year's works programme.

***Austhorpe Road***  
***A6120 to Penda's Way, Cross Gates***

**Ref No. : LLR030 Rank this year : 4 (last : 3 ) Grid Ref: 436500 / 434700**

**Urban B road Length (Km) : 0.75 Flow (AADT): 7850**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	1	0	4
	2007	3	0	0	3
	2008	2	1	0	3
	2009	4	1	0	5
	2010	1	1	0	2
	<b>Total</b>	<b>13</b>	<b>4</b>	<b>0</b>	<b>17</b>

**Accident Rates (100MVkm) Road Rate : 173 National Rate : 51 % of Norm : 339**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>24</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>12</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>12</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>47</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>0</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Seven of the accidents involved pedestrians, 4 of whom were elderly. Seven of the accidents involved falling PSV passengers, 4 of whom were elderly. The remaining accidents were comprised of various types, none of which occurred more than once.

**Recommendations**

A scheme which involved the relocation of bus stops, the provision of extra guardrail and improvements to the street furniture was installed on this length of road in early 2010. During the current financial year, a zebra crossing is to be introduced close to the junction with Marshall Street. The effect of these schemes will be closely monitored.

*A660 Woodhouse Lane  
Clarendon Road to Hillary Place, Woodhouse*

**Ref No. : LLR067 Rank this year : 5 (last : 6 ) Grid Ref: 429500 / 434700**

**Urban A road Length (Km) : 0.7 Flow (AADT): 22330**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	8	0	0	<b>8</b>
	2007	7	1	0	<b>8</b>
	2008	12	3	0	<b>15</b>
	2009	7	3	0	<b>10</b>
	2010	6	1	0	<b>7</b>
	<b>Total</b>	<b>40</b>	<b>8</b>	<b>0</b>	<b>48</b>

**Accident Rates (100MVkm) Road Rate : 184 National Rate : 56 % of Norm : 329**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>17</b>	<b>12</b>	<b>13</b>
<u>Accident</u> <i>Wet:</i>	<b>35</b>	<b>28</b>	<b>32</b>
<u>Percentages for</u> <u>URBAN A Road</u> <i>Dark:</i>	<b>35</b>	<b>26</b>	<b>28</b>
<i>Pedestrian:</i>	<b>48</b>	<b>14</b>	<b>16</b>
<i>Skid:</i>	<b>10</b>	<b>14</b>	<b>14</b>

**Accident Analysis**

Twenty three of the accidents involved pedestrians, with 18 of the casualties involved being aged between 17 and 25. The most common causation factor within the pedestrian accidents was alcohol impairment. Ten of the accidents were junction related turning conflicts, 4 of which involved vehicles turning left into St Mark's Street, across the path of pedal cycles. Seven of the accidents were nose to tail collisions. The remaining accidents were comprised of various types, all of which occurred in low numbers. A cluster of 11 accidents is located at the junction with St Marks Street.

**Recommendations**

In early 2010 a scheme was introduced which improved the cycle lane provision across the mouth of St Mark's Street. The full A660 cycle improvement scheme will commence in either the current or the next financial year. Contact has also been made with the University, in an attempt to reduce the incidence of injury to students.

***A58 Roundhay Road  
Bayswater Row to Harehills Road, Harehills***

**Ref No. : LLR121    Rank this year : 6 (last : 5 )    Grid Ref: 431707 / 435424**

**Urban A road                      Length (Km) : 0.61    Flow (AADT): 22970**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	13	1	0	<b>14</b>
	2007	5	1	0	<b>6</b>
	2008	7	0	0	<b>7</b>
	2009	9	0	0	<b>9</b>
	2010	4	1	0	<b>5</b>
	<b>Total</b>	<b>38</b>	<b>3</b>	<b>0</b>	<b>41</b>

**Accident Rates (100MVkm)    Road Rate : 176    National Rate : 56    % of Norm : 314**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>7</b>	<b>12</b>	<b>13</b>
<u>Accident</u> <i>Wet:</i>	<b>27</b>	<b>28</b>	<b>32</b>
<u>Percentages for</u> <u>URBAN A Road</u> <i>Dark:</i>	<b>27</b>	<b>26</b>	<b>28</b>
<i>Pedestrian:</i>	<b>27</b>	<b>14</b>	<b>16</b>
<i>Skid:</i>	<b>2</b>	<b>14</b>	<b>14</b>

**Accident Analysis**

Eleven of the accidents involved pedestrians, 7 of whom were masked to the vehicles which hit them and 4 of whom were struck by turning vehicles. Ten of the accidents were nose to tail collisions, 8 involved vehicles emerging from minor roads into the path of main road traffic and 4 were right turn conflicts. The remaining accidents were comprised of various types, all of which occurred in low numbers. An in-depth accident study, undertaken in January 2005, identified that one of the main influences in the accidents was congestion at periods when traffic informally begins to queue in two lanes. This situation leads to pedestrians being masked and drivers failing to see one another when carrying out turning manoeuvres and emerging from side streets.

**Recommendations**

A scheme which will provide an outbound bus lane, together with additional safety measures will be progressed further in the 2011/12 financial year.

***A62 Gelderd Road***  
***Gildersome village to City Park Industrial Estate, Gildersome***

**Ref No. : LLR057    Rank this year : 7 (last : 9 )    Grid Ref: 426000 / 430000**

**Rural A road                      Length (Km) : 2    Flow (AADT): 9400**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	5	1	0	<b>6</b>
	2007	2	3	0	<b>5</b>
	2008	2	1	0	<b>3</b>
	2009	0	0	0	<b>0</b>
	2010	3	2	0	<b>5</b>
	<b>Total</b>	<b>12</b>	<b>7</b>	<b>0</b>	<b>19</b>

**Accident Rates (100MVkm)    Road Rate : 61    National Rate : 20    % of Norm : 305**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>37</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>26</b>	<b>33</b>	<b>39</b>
<u>Percentages for</u> <u>RURAL A Road</u> <i>Dark:</i>	<b>21</b>	<b>28</b>	<b>30</b>
<i>Pedestrian:</i>	<b>11</b>	<b>2</b>	<b>2</b>
<i>Skid:</i>	<b>63</b>	<b>33</b>	<b>38</b>

**Accident Analysis**

Nine of the accidents were loss of control events, 4 of which occurred when the road surface was wet. Three of the accidents were nose to tail collisions, 2 involved vehicles emerging from minor roads into the path of main road traffic and 2 involved pedestrians. All 5 of the accidents that occurred in 2010 involved vehicles that skidded, with 4 of these accidents occurring between January and April. An in depth accident study, undertaken in 2007, found that the most common causation factors within the accidents on this length of road were excessive speed, alcohol impairment and attempting to evade the police.

**Recommendations**

Mobile safety cameras have been in use on this length of road since Spring 2010. At the time of writing (July) there have been no accidents on this length of road in 2011. It is recommended that the long term effects of the mobile safety cameras be monitored.

***B6157 Richardshaw Lane  
Laurel Mount to Lowtown, Pudsey***

**Ref No. : LLR035    Rank this year : 8 (last : 10 )    Grid Ref: 422200 / 433600**

**Urban B road                      Length (Km) : 0.4    Flow (AADT): 15760**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	4	0	0	4
	2007	3	0	0	3
	2008	4	0	0	4
	2009	3	0	0	3
	2010	2	0	0	2
	<b>Total</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>16</b>

**Accident Rates (100MVkm)    Road Rate : 152    National Rate : 51    % of Norm : 298**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>0</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>25</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>13</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>44</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>6</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Six of the accidents involved pedestrians, 4 of whom were children. Four of the accidents involved vehicles emerging from minor roads into the path of main road traffic and 2 involved falling PSV passengers. The remaining accidents included a variety of types, none of which occurred more than once.

**Recommendations**

A scheme completed in March 2006, introduced three pairs of speed cushions and two raised zebra crossings on this length of road. Although 5 of the pedestrian accidents were subsequent to the installation of this scheme there has been no pedestrian accidents on this length of road in the most recent two years. As such all that is recommended is that the long term effects of the improvement scheme continue to be monitored.

***Cardigan Road***  
***North Lane to Burley Road, Headingley***

**Ref No. : LLR031    Rank this year : 9 (last : 7 )    Grid Ref: 427910 / 435250**

**Urban B road                      Length (Km) : 1.52    Flow (AADT): 16290**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	20	1	0	<b>21</b>
	2007	8	1	0	<b>9</b>
	2008	10	1	0	<b>11</b>
	2009	6	3	0	<b>9</b>
	2010	12	0	0	<b>12</b>
	<b>Total</b>	<b>56</b>	<b>6</b>	<b>0</b>	<b>62</b>

**Accident Rates (100MVkm)    Road Rate : 150    National Rate : 51    % of Norm : 294**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>10</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>18</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>29</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>21</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>8</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Fourteen of the accidents involved vehicles emerging from minor roads into the path of main road traffic. Thirteen of the accidents involved pedestrians, with 8 of the casualties being children. Nine of the accidents were nose to tail collisions and 9 were right turn conflicts. Five of the accidents involved falling PSV passengers and 4 were signal violations. The remaining accidents were comprised of various types, all of which occurred in low numbers. Clusters of accidents are located at the junctions with Victoria Road (7), Ashville Road (6), St. Michael's Lane (6), and Cardigan

**Recommendations**

Improvements were made to the pedestrian crossing at the junction with Spring Road in December 2010. In view of the number of serious accidents recorded in recent years, consideration has been given to providing safety cameras on this length of road, but vehicular speeds do not meet the required criteria.

***Burley Road***  
***Willow Road to Westfield Road, Burley***

**Ref No. : LLR026    Rank this year : 10 (last : 14 )    Grid Ref: 428300 / 434300**

**Urban B road                      Length (Km) : 0.8    Flow (AADT): 17130**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	9	1	0	<b>10</b>
	2007	6	0	0	<b>6</b>
	2008	8	0	0	<b>8</b>
	2009	4	0	0	<b>4</b>
	2010	4	1	0	<b>5</b>
	<b>Total</b>	<b>31</b>	<b>2</b>	<b>0</b>	<b>33</b>

**Accident Rates (100MVkm)    Road Rate : 144    National Rate : 51    % of Norm : 282**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>6</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>24</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>24</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>27</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>15</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Nine of the accidents involved turning conflicts, with 7 of these occurring in the most recent 2 years. Although the computer held data are ambiguous in some cases, it would appear that misuse of the bus lane was a factor in a number of these accidents. Nine of the accidents involved pedestrians, 8 involved vehicles emerging into the path of main road traffic and 5 were nose to tail collisions. The remaining accidents were comprised of various types, all of which occurred in low numbers.

**Recommendations**

A scheme completed in 2008 introduced a new outbound bus and cycle lane, pedestrian crossings and parking bays. Signs warning of the use of bus lane enforcement cameras were installed in June 2010, with the actual cameras being installed in October 2011. The effects that these cameras have on the accident rate will be monitored.

***B6137 Main Street  
A642 to Beech Grove Avenue, Garforth***

**Ref No. : LLR042    Rank this year : 11 (last : 0 )    Grid Ref: 440200 / 432900**

**Urban B road                      Length (Km) : 0.56    Flow (AADT): 9010**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	1	0	0	1
	2007	1	1	0	2
	2008	2	0	0	2
	2009	1	1	0	2
	2010	4	1	0	5
	<b>Total</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>12</b>

**Accident Rates (100MVkm)    Road Rate : 143    National Rate : 51    % of Norm : 280**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>25</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>17</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>17</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>75</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>8</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Nine of the accidents involved pedestrians. Four of the pedestrian casualties were children, 2 of whom were masked to the vehicle which struck them. Four of the pedestrian casualties were elderly, 2 of whom were misusing zebra crossings at the time of the accident. The vehicular conflicts were comprised of various types, none of which occurred more than once.

**Recommendations**

In late 2008, a Zebra crossing was introduced in the vicinity of the junctions with Fidler Lane and Coupland Road. A scheme which involved improvements to the pedestrian guardrail and the street furniture was installed in early 2010. Consideration is currently being given to a parking strategy which will also encompass the overall environment of Main Street in relation to associated issues, including pedestrian provision.

***Spencer Place***  
***50m south of Leopold Street to Back Pasture Road, Harehills***

**Ref No. : LLR016    Rank this year : 12 (last : 0 )    Grid Ref: 431400 / 435400**

**Urban B road                      Length (Km) : 0.7    Flow (AADT): 6270**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	0	0	0	<b>0</b>
	2007	2	0	0	<b>2</b>
	2008	0	1	0	<b>1</b>
	2009	3	0	0	<b>3</b>
	2010	3	1	0	<b>4</b>
	<b>Total</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>

**Accident Rates (100MVkm)    Road Rate : 137    National Rate : 51    % of Norm : 269**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>20</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>30</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>20</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>10</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>10</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

A mixed pattern of accidents, with no grouping recording an annual average as high as 1 event per year. There were 3 loss of control events and 2 cases each of nose to tail collisions and pedal cycles being ridden into the path of cars. The remaining 3 accidents were entirely disparate types.

**Recommendations**

The length is provided with speed humps and it is speculated that the increase in accidents in the two most recent study years is an extended statistical anomaly. Discussions are currently ongoing with a view to resolving parking issues and improving conditions at junctions.

***B6154 Lowtown***  
***Market Place to Kent Road, Pudsey***

**Ref No. : LLR024    Rank this year : 13 (last : 13 )    Grid Ref: 422500 / 433500**

**Urban B road                      Length (Km) : 0.7    Flow (AADT): 15890**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	6	1	0	7
	2007	6	1	0	7
	2008	2	3	0	5
	2009	2	0	0	2
	2010	4	0	0	4
	<b>Total</b>	<b>20</b>	<b>5</b>	<b>0</b>	<b>25</b>

**Accident Rates (100MVkm)    Road Rate : 135    National Rate : 51    % of Norm : 265**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>20</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>8</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>20</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>40</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>0</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Ten of the accidents involved pedestrians, 3 of whom were intoxicated at the time. Eight of the accidents involved falling PSV passengers, 6 of whom were elderly. Three of the accidents involved vehicles emerging into the path of main road traffic. The remaining accidents were comprised of various types, none of which occurred more than once. A cluster of 6 accidents is located at the Market Street Bus Station, 4 of which involved pedestrians.

**Recommendations**

In May 2006, a scheme was completed which provided buildouts at the entrances to several junctions, pedestrian crossing facilities and protected parking areas. Kerbing arrangements were also modified on the approach to the signalised crossing at the western end of Lowtown. These measures were complemented with waiting and loading restrictions and resident permit parking. An in depth study of the accidents on this length of road was undertaken in February 2010 which recommended further measures to assist pedestrians. Major alterations have been made to Church Lane as part of the redevelopment of the Market Street Bus Station which was completed in late 2010 and minor measures, involving informal assistance for pedestrians and lining works, will be installed in the current financial year. The effects of these alterations will be monitored.

***Swinnow Road***  
***Intake Road to Wellstone Avenue, Swinnow***

**Ref No. : LLR126    Rank this year : 14 (last : 21 )    Grid Ref: 423350 / 433950**

**Urban B road                      Length (Km) : 1    Flow (AADT): 11080**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	4	1	0	<b>5</b>
	2007	4	2	0	<b>6</b>
	2008	1	2	0	<b>3</b>
	2009	5	0	0	<b>5</b>
	2010	4	2	0	<b>6</b>
	<b>Total</b>	<b>18</b>	<b>7</b>	<b>0</b>	<b>25</b>

**Accident Rates (100MVkm)    Road Rate : 135    National Rate : 51    % of Norm : 265**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>28</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>16</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>40</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>32</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>20</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Eight of the accidents involved pedestrians, 5 of whom were children. The remaining accidents were comprised of various types and included accidents involving vehicles emerging into the path of main road traffic (4), right turn conflicts (3), loss of control events (3) falling PSV passengers (2), and signal violations (2). A cluster of 8 accidents is located at the junction with Swinnow Lane, 4 of which occurred in 2010.

**Recommendations**

A traffic calming scheme comprised of build-outs, pedestrian refuges and a Puffin crossing in the vicinity of Swinnow Primary school, was installed in 2007 and speed cushions were introduced in 2008. At the time of writing (July) there had been no further accidents at the junction of Swinnow Road with Swinnow Lane. It is recommended that the long term effects of the traffic calming measures on this length of road continue to be annually reviewed.

***B6156 Calverley Lane / Old Road / Town Street  
Durham Court Flats to Bryan Street, Farsley***

**Ref No. : LLR006    Rank this year : 15 (last : 8 )    Grid Ref: 421756 / 435239**

**Urban B road                      Length (Km) : 0.51    Flow (AADT): 10500**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	2	0	0	2
	2007	4	0	0	4
	2008	0	0	0	0
	2009	5	0	0	5
	2010	1	0	0	1
	<b>Total</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>12</b>

**Accident Rates (100MVkm)    Road Rate : 134    National Rate : 51    % of Norm : 263**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>0</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>42</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>17</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>33</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>8</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Four of the accidents involved pedestrian injury, with 2 of the casualties being very elderly. These accidents were located on a section of approximately 200 metres, between Well Street and Wesley Street. There were also 3 cases, all recorded in 2009, of passengers falling inside PSVs. Two of the remaining 5 accidents involved nose to tail collisions.

**Recommendations**

A traffic management scheme, designed to improve conditions for all road users, was completed in October 2006. Longer-term monitoring of the situation will be maintained.

***B6159 Stainbeck Road***  
***Scott Hall Road to Grove Road, Meanwood***

**Ref No. : LLR129    Rank this year : 16 (last : 11 )    Grid Ref: 429310 / 437250**

**Urban B road                      Length (Km) : 1.64    Flow (AADT): 7110**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	5	0	0	<b>5</b>
	2007	6	1	0	<b>7</b>
	2008	2	2	0	<b>4</b>
	2009	6	0	0	<b>6</b>
	2010	3	1	0	<b>4</b>
	<b>Total</b>	<b>22</b>	<b>4</b>	<b>0</b>	<b>26</b>

**Accident Rates (100MVkm)    Road Rate : 134    National Rate : 51    % of Norm : 263**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>15</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>27</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>23</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>12</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>15</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Six of the accidents were nose to tail collisions, 5 were loss of control events and 4 involved vehicles emerging from minor roads into the path of main road traffic. Three of the accidents were right turn conflicts, 3 involved pedestrians and 2 were signal violations. A cluster of 7 accidents is located at the junction with Stainbeck Lane, which was signalised in November 2006.

**Recommendations**

Fixed Safety Cameras were introduced on this length of road in late 2009, the long term effects of which will continue to be monitored.

***A65 Kirkstall Road***  
***Woodside View to Weaver Street, Kirkstall***

**Ref No. : LLR025    Rank this year : 17 (last : 18 )    Grid Ref: 427400 / 434600**

**Urban A road                      Length (Km) : 0.85    Flow (AADT): 26780**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	11	4	0	<b>15</b>
	2007	10	1	0	<b>11</b>
	2008	11	4	0	<b>15</b>
	2009	5	2	0	<b>7</b>
	2010	7	0	0	<b>7</b>
	<b>Total</b>	<b>44</b>	<b>11</b>	<b>0</b>	<b>55</b>

**Accident Rates (100MVkm)    Road Rate : 145    National Rate : 56    % of Norm : 259**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>20</b>	<b>12</b>	<b>13</b>
<u>Accident</u> <i>Wet:</i>	<b>31</b>	<b>28</b>	<b>32</b>
<u>Percentages for</u> <u>URBAN A Road</u> <i>Dark:</i>	<b>29</b>	<b>26</b>	<b>28</b>
<i>Pedestrian:</i>	<b>13</b>	<b>14</b>	<b>16</b>
<i>Skid:</i>	<b>2</b>	<b>14</b>	<b>14</b>

**Accident Analysis**

Twelve of the accidents involved vehicles emerging from minor roads into the path of main road traffic. There were also 10 cases each of nose to tail collisions and vehicles turning either left or right into side roads, across the path, in each case, of a pedal cyclist. Seven accidents involved pedestrian injury, and other than 4 signal violations, the remaining accidents were comprised of various types, all of which registered low annual totals. The accidents are widely distributed along the length, but with clusters of 7 recorded at the junctions with Milford Place and Cardigan Fields

**Recommendations**

Safety cameras were installed on this length in February 2008 and already appear to be having a favourable impact. The A65 Quality Bus scheme, which is due for completion in summer 2012, will also affect conditions on this length. Monitoring of both these initiatives will be maintained.

***A657 Lower Town Street  
Stanningley Road to Hough Lane, Bramley***

**Ref No. : LLR080    Rank this year : 18 (last : 22 )    Grid Ref: 424800 / 434800**

**Urban A road                      Length (Km) : 0.7    Flow (AADT): 13320**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	5	0	0	<b>5</b>
	2007	8	0	0	<b>8</b>
	2008	0	0	0	<b>0</b>
	2009	4	0	0	<b>4</b>
	2010	5	0	0	<b>5</b>
	<b>Total</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>22</b>

**Accident Rates (100MVkm)    Road Rate : 142    National Rate : 56    % of Norm : 254**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>0</b>	<b>12</b>	<b>13</b>
<u>Accident</u> <i>Wet:</i>	<b>32</b>	<b>28</b>	<b>32</b>
<u>Percentages for</u> <u>URBAN A Road</u> <i>Dark:</i>	<b>14</b>	<b>26</b>	<b>28</b>
<i>Pedestrian:</i>	<b>14</b>	<b>14</b>	<b>16</b>
<i>Skid:</i>	<b>0</b>	<b>14</b>	<b>14</b>

**Accident Analysis**

Five of the accidents involved vehicles emerging into the path of main road traffic, 5 involved falling PSV passengers and 5 were nose to tail collisions. Three of the accidents involved pedestrians and 2 were left turn conflicts involving pedal cycles. A cluster of 5 accidents is located at the junction with the entrance to Bramley shopping centre car park, 3 of which involved vehicles emerging from the car park into the path of main road traffic.

**Recommendations**

As the accidents form such a mixed all that is recommended is that this length continue to be annually reviewed.

***Nippet Lane / Compton Road / Stoney Rock Lane  
Beckett Street to Harehills Lane, Burmantofts***

**Ref No. : LLR085    Rank this year : 19 (last : 27 )    Grid Ref: 431900 / 434300**

**Urban B road                      Length (Km) : 1.4    Flow (AADT): 11950**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	4	0	0	<b>4</b>
	2007	10	0	0	<b>10</b>
	2008	7	0	0	<b>7</b>
	2009	5	2	0	<b>7</b>
	2010	7	0	0	<b>7</b>
	<b>Total</b>	<b>33</b>	<b>2</b>	<b>0</b>	<b>35</b>

**Accident Rates (100MVKm)    Road Rate : 126    National Rate : 51    % of Norm : 247**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>6</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>29</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>23</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>29</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>0</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Twelve of the accidents involved falling PSV passengers. Although the computer held data are ambiguous in some cases it would appear that many of these accidents occurred when the PSVs were forced to brake to avoid colliding with other vehicles. Ten of the accidents involved pedestrians, 6 were nose to tail collisions and 4 involved vehicles emerging into the path of other traffic. The remaining accidents were disparate types. The accidents are now concentrated at either end of the length, with very few recorded on the central stretch between Torre Road and Stanley

**Recommendations**

A scheme which introduced traffic calming measures, including chicanes, central hatching and improved road markings, between Torre Road and Stanley Road was completed in Spring 2005. It is unlikely that further cost effective measures could be found to reduce the accident rate on this length of road and, as such, all that is recommended is that it continue to be annually reviewed.

***A642 Wakefield Road***  
***A63 Roundabout to Goody Cross Lane, Swillington***

**Ref No. : LLR012    Rank this year : 20 (last : 0 )    Grid Ref: 439000 / 431500**

**Rural A road                      Length (Km) : 2    Flow (AADT): 11150**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	1	0	4
	2007	3	0	0	3
	2008	2	0	0	2
	2009	1	2	0	3
	2010	4	0	2	6
	<b>Total</b>	<b>13</b>	<b>3</b>	<b>2</b>	<b>18</b>

**Accident Rates (100MVkm)    Road Rate : 48    National Rate : 20    % of Norm : 240**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>28</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>17</b>	<b>33</b>	<b>39</b>
<u>Percentages for</u> <u>RURAL A Road</u> <i>Dark:</i>	<b>17</b>	<b>28</b>	<b>30</b>
<i>Pedestrian:</i>	<b>0</b>	<b>2</b>	<b>2</b>
<i>Skid:</i>	<b>17</b>	<b>33</b>	<b>38</b>

**Accident Analysis**

Eight accidents involved failure to give way by vehicles entering the main road from a minor arm. Seven of these were recorded at the junction with Whitehouse Lane, which is also monitored as a Site for Concern. In at least 5 of the Whitehouse Lane accidents, the offending driver was turning right as they emerged. There were also 5 nose to tail collisions and 4 loss of control events. The final accident, which was 1 of the 2 fatal events recorded in 2010, involved a pedal cyclist riding from the footway into the path of a van.

**Recommendations**

Much of the excess in the accident rate on this length is attributable to the situation at the junction with Whitehouse Lane. An in-depth study, completed in 2010 recommended a general improvement scheme, aimed at improving conspicuity. This scheme will be developed in the 2012/13 financial year. The study also recommended a reduction in the speed limit to 50 mph.

***B6159 Harehills Lane  
Compton Road to York Road, Burmantofts***

**Ref No. : LLR009    Rank this year : 21 (last : 20 )    Grid Ref: 432700 / 434400**

**Urban B road                      Length (Km) : 0.93    Flow (AADT): 12400**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	9	0	0	<b>9</b>
	2007	4	1	0	<b>5</b>
	2008	1	0	0	<b>1</b>
	2009	1	2	0	<b>3</b>
	2010	4	1	0	<b>5</b>
	<b>Total</b>	<b>19</b>	<b>4</b>	<b>0</b>	<b>23</b>

**Accident Rates (100MVkm)    Road Rate : 120    National Rate : 51    % of Norm : 235**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>17</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>30</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>48</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>30</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>17</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Seven of the accidents involved pedestrians, 5 of whom were children. However, only 1 of these accidents was recorded in the three most recent study years. Six of the accidents involved vehicles emerging into the path of main road traffic and 3 were right turn conflicts. The remaining 7 accidents were comprised of various, mainly vehicular types, almost all of which registered single occurrences. A cluster of 6 accidents is located at the junction with Coldcotes Avenue. This incorporates the 2 serious accidents that occurred in 2009, both of which were turning conflicts involving motor cyclists.

**Recommendations**

A pedestrian refuge was introduced at the junction with Lupton Avenue in December 2008 and a Toucan crossing was switched on at the vicinity of Kimberley Road in July 2010. Despite a disappointing total in 2010, the length is generally performing well and continued monitoring is all that is currently required.

***Pepper Road / Sussex Avenue***  
***Bridge over M621 to A639 Wakefield Road, Hunslet Carr***

**Ref No. : LLR132    Rank this year : 22 (last : 15 )    Grid Ref: 431000 / 430650**

**Urban B road                      Length (Km) : 1    Flow (AADT): 6060**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	5	0	0	5
	2007	1	1	0	2
	2008	1	1	0	2
	2009	1	1	0	2
	2010	1	0	0	1
	<b>Total</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>12</b>

**Accident Rates (100MVkm)    Road Rate : 119    National Rate : 51    % of Norm : 233**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>25</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>17</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>33</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>8</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>17</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Three of the accidents were loss of control events and 3 involved vehicles emerging into the path of main road traffic. The remaining accidents were comprised of a variety of types, with only those involving falling PSV passengers (2) occurring more than once.

**Recommendations**

A new signing package was installed along this length of road in autumn 2009, the long term effects of which will continue to be annually reviewed.

***Chapelton Road  
Barrack Road to Harehills Lane, Harehills***

**Ref No. : LLR056    Rank this year : 23 (last : 16 )    Grid Ref: 430800 / 435800**

**Urban B road                      Length (Km) : 1.4    Flow (AADT): 22630**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	12	2	0	<b>14</b>
	2007	16	1	0	<b>17</b>
	2008	11	2	0	<b>13</b>
	2009	10	2	0	<b>12</b>
	2010	6	1	0	<b>7</b>
	<b>Total</b>	<b>55</b>	<b>8</b>	<b>0</b>	<b>63</b>

**Accident Rates (100MVkm)    Road Rate : 119    National Rate : 51    % of Norm : 233**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>13</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>25</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>30</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>21</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>11</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Eighteen of the accidents involved vehicles emerging into the path of main road traffic. Thirteen of the accidents involved pedestrians, 12 were nose to tail collisions and 11 were turning conflicts. The remaining accidents included a variety of types, all of which occurred in low numbers. A cluster of 11 accidents is located at the junction with Savile Drive / Louis Street, 4 of which involved vehicles emerging from the minor roads into the path main road traffic.

**Recommendations**

Pedestrian crossings were installed along this length of road in June/July 2010 in the vicinity of Chapel Allerton Hospital, Newton Parade, Francis Street and Grange Terrace. A comprehensive general improvement scheme was completed in March 2011, the effects of which will be monitored.

***Robin Lane / Littlemoor Road  
Lowtown to Roker Lane, Pudsey***

**Ref No. : LLR100    Rank this year : 24 (last : 12 )    Grid Ref: 422413 / 432734**

**Urban B road                      Length (Km) : 1.4    Flow (AADT): 6940**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	2	0	0	2
	2007	4	0	0	4
	2008	2	1	0	3
	2009	4	1	0	5
	2010	4	1	0	5
	<b>Total</b>	<b>16</b>	<b>3</b>	<b>0</b>	<b>19</b>

**Accident Rates (100MVkm)    Road Rate : 117    National Rate : 51    % of Norm : 229**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>16</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>37</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>21</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>26</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>11</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Four of the accidents involved pedestrians, 3 of whom were children and were masked to the vehicle which struck them. Four of the accidents involved vehicles emerging from minor roads into the path of main road traffic and 4 were loss of control events. Two of the accidents involved falling PSV passengers and 2 were nose to tail collisions. The remaining accidents were comprised of various types, none of which occurred more than once.

**Recommendations**

In Summer 2006, a series of remedial measures were completed, including improved signing arrangements and tactile paving and dropped kerbs to improve conditions for pedestrians. Junction build-outs, right turn lanes, better facilities for PSVs and formalised parking bays were also introduced. A scheme to provide two zebra crossings in the vicinity of Crawshaw School was completed in March 2011. It is recommended that the effects of the various improvements to this length of road be monitored.

***Hough Lane***  
***Stanningley Road to Lower Town Street, Bramley***

**Ref No. : LLR139    Rank this year : 25 (last : 25 )    Grid Ref: 424380 / 434900**

**Urban B road                      Length (Km) : 0.83    Flow (AADT): 6950**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	2	1	0	3
	2007	2	0	0	2
	2008	4	0	0	4
	2009	1	0	0	1
	2010	0	1	0	1
	<b>Total</b>	<b>9</b>	<b>2</b>	<b>0</b>	<b>11</b>

**Accident Rates (100MVkm)    Road Rate : 114    National Rate : 51    % of Norm : 224**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>18</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>36</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>36</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>18</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>9</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Three of the accidents involved vehicles emerging into the path of main road traffic and 2 were collisions with parked vehicles. The remaining accidents were comprised of various types, none of which occurred more than once.

**Recommendations**

A package of traffic calming measures between the junctions with Henley Crescent and St Peter's Mount, which included plateaux and speed humps, was completed in spring 2009. Early indications are that these measures have led to a reduction in the accident rate on this length of road and, as such, all that is recommended is that it continue to be annually reviewed.

***Chapel Street / Cross Green Lane / Green Lane  
Selby Road to Station Road, Cross Gates***

**Ref No. : LLR120 Rank this year : 26 (last : 19 ) Grid Ref: 435637 / 433894**

**Urban B road Length (Km) : 1.18 Flow (AADT): 5850**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	1	1	0	2
	2007	2	0	0	2
	2008	3	1	0	4
	2009	4	0	0	4
	2010	1	0	0	1
	<b>Total</b>	<b>11</b>	<b>2</b>	<b>0</b>	<b>13</b>

**Accident Rates (100MVkm) Road Rate : 113 National Rate : 51 % of Norm : 222**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>15</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>31</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>23</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>46</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>15</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Six of the accidents involved pedestrians, one of whom was hit following a right turn conflict. Three of the pedestrians were children. Three of the accidents were loss of control events and 2 involved falling PSV passengers. The remaining accidents were comprised of various types, none of which occurred more than once. The accidents are dispersed along the length, with no sign of clustering.

**Recommendations**

A scheme which introduced central hatching and signing indicating the presence of bends was completed in March 2011. It is anticipated that this may reduce vehicular speed due to a restriction of the carriageway width. The effect of the scheme will be closely monitored.

***Kirkstall Hill***  
***Kirkstall Lane to St Ann's Lane, Kirkstall***

**Ref No. : LLR101    Rank this year : 27 (last : 17 )    Grid Ref: 426851 / 435469**

**Urban B road                      Length (Km) : 0.76    Flow (AADT): 11280**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	1	4	0	<b>5</b>
	2007	3	0	0	<b>3</b>
	2008	4	2	0	<b>6</b>
	2009	0	0	0	<b>0</b>
	2010	1	1	0	<b>2</b>
	<b>Total</b>	<b>9</b>	<b>7</b>	<b>0</b>	<b>16</b>

**Accident Rates (100MVkm)    Road Rate : 112    National Rate : 51    % of Norm : 220**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>44</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>25</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>44</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>25</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>13</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Four of the accidents involved pedestrians and 3 involved vehicles emerging from minor roads into the path of main road traffic. Two of the accidents were loss of control events and 2 were nose to tail collisions. The remaining accidents were comprised of various types, none of which occurred more than once.

**Recommendations**

Fixed safety cameras were introduced on this length of road in the 2009/10 financial year, the long term effects of which will continue to be monitored.

## *East Chevin Road / Otley Old Road*

*400m south east Silver Mill Hill to A658 Harrogate Road, East Chevin*

**Ref No. : LLR137 Rank this year : 28 (last : 29 ) Grid Ref: 422050 / 443870**

**Rural B road Length (Km) : 2.4 Flow (AADT): 6610**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	4	0	0	4
	2007	2	1	0	3
	2008	2	2	0	4
	2009	5	1	0	6
	2010	3	0	0	3
	<b>Total</b>	<b>16</b>	<b>4</b>	<b>0</b>	<b>20</b>

**Accident Rates (100MVkm) Road Rate : 76 National Rate : 35 % of Norm : 217**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>20</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>20</b>	<b>36</b>	<b>43</b>
<u>Percentages for</u> <u>RURAL B Road</u> <i>Dark:</i>	<b>20</b>	<b>27</b>	<b>30</b>
<i>Pedestrian:</i>	<b>5</b>	<b>4</b>	<b>3</b>
<i>Skid:</i>	<b>50</b>	<b>35</b>	<b>41</b>

### Accident Analysis

Eight of the accidents were loss of control events. Several contributory factors were cited within these accidents including alcohol impairment, driver inexperience, travelling at injudicious speed, and swerving to avoid an animal in the road. Five of the accidents involved vehicles emerging from minor roads into the path of main road traffic and 4 were right turn conflicts. The remaining accidents were comprised of various types, none of which occurred more than once.

### Recommendations

In light of the high percentage of accidents that involved vehicles which skidded it is recommended that the condition of the road surface be reviewed.

***A660 Headingley Lane***  
***Hyde Park Corner to Bainbrigge Road, Headingley***

**Ref No. : LLR066    Rank this year : 29 (last : 30 )    Grid Ref: 428200 / 429800**

**Urban A road                      Length (Km) : 1.15    Flow (AADT): 22120**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	6	1	0	7
	2007	10	2	0	12
	2008	11	1	0	12
	2009	9	1	0	10
	2010	7	1	0	8
	<b>Total</b>	<b>43</b>	<b>6</b>	<b>0</b>	<b>49</b>

**Accident Rates (100MVKm)    Road Rate : 116    National Rate : 56    % of Norm : 207**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>12</b>	<b>12</b>	<b>13</b>
<u>Accident</u> <i>Wet:</i>	<b>27</b>	<b>28</b>	<b>32</b>
<u>Percentages for</u> <u>URBAN A Road</u> <i>Dark:</i>	<b>20</b>	<b>26</b>	<b>28</b>
<i>Pedestrian:</i>	<b>10</b>	<b>14</b>	<b>16</b>
<i>Skid:</i>	<b>2</b>	<b>14</b>	<b>14</b>

**Accident Analysis**

Fourteen of the accidents involved right turn conflicts, all but 1 of which involved a pedal cycle. Nine of the accidents involved vehicles emerging from minor roads into the path of main road traffic, with 5 of these also involving pedal cycles and many featuring masking by parked vehicles. Six of the accidents were left turn conflicts, all of which involved a pedal cycle, and 5 of the accidents involved pedestrians. The remaining accidents were comprised of various types, with only nose to tail collisions (3) and accidents involving falling PSV passengers (3) occurring more than once. Overall pedal cycles were involved in 35 of the 49 accidents.

**Recommendations**

The A660 cycle improvement scheme will commence in either the current or the next financial year. Works to convert Bainbrigge Road to one way [exiting] working are also imminent. The effects of both these measures will be monitored and results reported in due course.

***Street Lane***  
***Scott Hall Road to Park Lane, Moortown***

**Ref No. : LLR105    Rank this year : 30 (last : 26 )    Grid Ref: 431531 / 438805**

**Urban B road                      Length (Km) : 2.4    Flow (AADT): 14260**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	12	3	0	<b>15</b>
	2007	6	1	1	<b>8</b>
	2008	15	1	0	<b>16</b>
	2009	9	0	0	<b>9</b>
	2010	10	1	0	<b>11</b>
	<b>Total</b>	<b>52</b>	<b>6</b>	<b>1</b>	<b>59</b>

**Accident Rates (100MVkm)    Road Rate : 103    National Rate : 51    % of Norm : 202**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>12</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>24</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>29</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>25</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>8</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Fifteen of the accidents involved pedestrians, 5 of whom were children and 4 of whom were elderly. Ten of the accidents involved vehicles emerging into the path of main road traffic, 3 of which occurred after the 2008 improvement scheme mentioned below. Nine of the accidents were right turn conflicts and 6 were loss of control events. Five of the accidents involved falling PSV passengers and 4 were signal violations. The remaining accidents were comprised of various types, all of which occurred in low numbers. A cluster of 20 accidents was located at the junction with Harrogate Road, the majority of which were either right turn conflicts or signal violations.

**Recommendations**

An extensive traffic calming scheme, which introduced central islands and a consistent "No waiting at any time" order at junctions, in order to improve visibility between main and side road drivers and provide a clearer view of crossing pedestrians, was completed in September 2008 and a zebra crossing is to be provided at the junction with Norton Road during the current financial year. The long term effects of these measures will continue to be annually reviewed.

***Henconner Lane***  
***Pudsey Road to Green Hill Road, Bramley***

**Ref No. : LLR115    Rank this year : 31 (last : 31 )    Grid Ref: 425110 / 433776**

**Urban B road                      Length (Km) : 0.8    Flow (AADT): 10710**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	0	0	<b>3</b>
	2007	1	1	0	<b>2</b>
	2008	1	2	0	<b>3</b>
	2009	4	0	0	<b>4</b>
	2010	2	0	0	<b>2</b>
	<b>Total</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>14</b>

**Accident Rates (100MVkm)    Road Rate : 98    National Rate : 51    % of Norm : 192**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>21</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>43</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>36</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>36</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>29</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Five of the accidents involved pedestrians and 4 were loss of control events. Two of the accidents involved vehicles emerging into the path of main road traffic and 2 were nose to tail collisions. The remaining accident was a disparate event. A cluster of 5 accidents is located at the junction with Poplar Way.

**Recommendations**

Despite the introduction in September 2006, of lighting and road marking improvements, the repositioning of a bus stop and improved parking and cycle provision, there has been no notable reduction in the accident rate. An investigation into the quality of the road surface, relating to the loss of control accidents is to be made and the outcome will be detailed in future editions of this report.

***Middleton Park Avenue***  
***Middleton Park Mount to Throstle Road, Middleton***

**Ref No. : LLR023    Rank this year : 32 (last : 32 )    Grid Ref: 429900 / 427700**

**Urban B road                      Length (Km) : 0.94    Flow (AADT): 8540**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	0	0	3
	2007	2	1	0	3
	2008	2	0	0	2
	2009	2	0	0	2
	2010	2	1	0	3
	<b>Total</b>	<b>11</b>	<b>2</b>	<b>0</b>	<b>13</b>

**Accident Rates (100MVkm)    Road Rate : 97    National Rate : 51    % of Norm : 190**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>15</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>15</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>23</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>31</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>31</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

The accident pattern remains mixed, with low annual totals and no clearly dominant pattern. Four accidents involved pedestrian injury, with all the casualties being aged 12-15. There were also 3 instances each of falling PSV passengers, and failure to give way types. The remaining 3 accidents were all disparate types.

**Recommendations**

In 2009 resurfacing works were undertaken and the existing signing package was refurbished. Monitoring of the effects of these improvements will continue.

***Armley Ridge Road / Cockshott Lane  
Stanningley Road to Raynville Road, Upper Armley***

**Ref No. : LLR099    Rank this year : 33 (last : 48 )    Grid Ref: 425942 / 434660**

**Urban B road                      Length (Km) : 1.01    Flow (AADT): 13560**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	0	0	3
	2007	2	2	0	4
	2008	1	0	0	1
	2009	5	1	0	6
	2010	6	2	0	8
	<b>Total</b>	<b>17</b>	<b>5</b>	<b>0</b>	<b>22</b>

**Accident Rates (100MVkm)    Road Rate : 96    National Rate : 51    % of Norm : 188**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>24</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>48</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>43</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>24</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>10</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Six of the accidents involved vehicles emerging from minor roads into the path of main road traffic, 5 of which occurred at the junction of Armley Ridge Road with Cockshott Lane. Two of these 5 accidents involved vehicles that emerged into the path of motorcycles. In both cases the motor cyclists were overtaking other main road traffic on the approach to the junction and were masked to the emerging driver. Five of the accidents involved pedestrians, 4 were nose to tail collisions and 2 were loss of control events. The remaining accidents were comprised of various types, none of which occurred more than once.

**Recommendations**

A scheme which introduced pedestrian refuges near the junction with Raynville Road was completed in early 2007. The police files and witness statements for the accidents on this length were reviewed in January 2011. It was found during this review that a common causation factor within the accidents on this length of road was the injudicious use of speed and, as such, a survey to ascertain its suitability for the use of safety cameras is being assessed, with the results to be studied in late

***Broad Lane***  
***Upper Town Street to Wyther Lane, Sandford***

**Ref No. : LLR098    Rank this year : 34 (last : 28 )    Grid Ref: 424895 / 435638**

**Urban B road                      Length (Km) : 1.89    Flow (AADT): 7740**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	4	2	0	<b>6</b>
	2007	5	2	0	<b>7</b>
	2008	4	0	0	<b>4</b>
	2009	2	1	0	<b>3</b>
	2010	3	0	0	<b>3</b>
	<b>Total</b>	<b>18</b>	<b>5</b>	<b>0</b>	<b>23</b>

**Accident Rates (100MVkm)    Road Rate : 94    National Rate : 51    % of Norm : 184**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>22</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>52</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>26</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>9</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>30</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Six of the accidents involved vehicles emerging from minor roads into the path of main road traffic and 5 were nose to tail collisions. Three of the accidents were right turn conflicts and 3 were loss of control events. The remaining accidents were comprised of numerous types, with only those involving pedestrians (2) occurring more than once.

**Recommendations**

Fixed Safety Cameras were introduced on this length of road during 2010, the effects of which will be monitored.

***South Parkway***  
***Old York Road to Foundry Mill Drive, Seacroft***

**Ref No. : LLR108    Rank this year : 35 (last : 23 )    Grid Ref: 435100 / 435700**

**Urban B road                      Length (Km) : 1.5    Flow (AADT): 6280**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	0	0	<b>3</b>
	2007	1	0	0	<b>1</b>
	2008	3	2	0	<b>5</b>
	2009	3	1	0	<b>4</b>
	2010	1	0	0	<b>1</b>
	<b>Total</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>14</b>

**Accident Rates (100MVkm)    Road Rate : 89    National Rate : 51    % of Norm : 175**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>21</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>29</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>21</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>43</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>29</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Five of the accidents involved pedestrians, 3 of whom were children. Three of the accidents were loss of control events and 2 involved falling PSV passengers. The remaining accidents were comprised of various types, none of which occurred more than once.

**Recommendations**

In March 2006 a scheme incorporating footway extensions at junctions, sheltered parking bays and central islands was installed, and a pelican crossing is to be provided at the junction with Kentmere Avenue, in connection with an adjacent housing development. Whilst the longer term effects of all these works will be monitored, it is speculated that additional work may be necessary to further reduce vehicle speeds.

***Preston Lane / Leeds Road / Station Road***  
***300m W of Barnsdale Road to Whitehouse Avenue, Allerton Bywater***

**Ref No. : LLR083    Rank this year : 36 (last : 35 )    Grid Ref: 441000 / 428700**

**Urban B road                      Length (Km) : 3.68    Flow (AADT): 4100**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	6	0	1	7
	2007	3	1	0	4
	2008	5	0	0	5
	2009	2	1	0	3
	2010	3	0	0	3
	<b>Total</b>	<b>19</b>	<b>2</b>	<b>1</b>	<b>22</b>

**Accident Rates (100MVkm)    Road Rate : 87    National Rate : 51    % of Norm : 171**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>14</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>32</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>27</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>9</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>23</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Six accidents involved vehicles failing to give way; this being the only grouping to record an annual average total in excess of a single event per year. There were also 4 loss of control events and 3 nose to tail collisions. Other than 2 cases of pedestrian injury, the remaining accidents were all disparate types. The accidents are randomly distributed throughout the length, with no notable

**Recommendations**

Whilst annual totals are generally moderate, the ratio of accidents involving skidding is high and consideration should be given to an inspection of the road surface.

***Mill Lane / Hillings Lane  
Baildon to Menston, Hawksworth***

**Ref No. : LLR018    Rank this year : 37 (last : 36 )    Grid Ref: 415900 / 442500**

**Rural B road                      Length (Km) : 2.5    Flow (AADT): 4590**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	0	0	3
	2007	1	1	0	2
	2008	1	1	0	2
	2009	2	1	0	3
	2010	1	0	0	1
	<b>Total</b>	<b>8</b>	<b>3</b>	<b>0</b>	<b>11</b>

**Accident Rates (100MVkm)    Road Rate : 58    National Rate : 35    % of Norm : 166**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>27</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>36</b>	<b>36</b>	<b>43</b>
<u>Percentages for</u> <u>RURAL B Road</u> <i>Dark:</i>	<b>36</b>	<b>27</b>	<b>30</b>
<i>Pedestrian:</i>	<b>0</b>	<b>4</b>	<b>3</b>
<i>Skid:</i>	<b>36</b>	<b>35</b>	<b>41</b>

**Accident Analysis**

Five of the accidents involved loss of control, with the majority being associated with one or other of the bends along the length. Excessive speed was noted as the most common causation factor in this grouping. Three accidents involved vehicles emerging into the path of other traffic all of which were located at the Goose Lane / Old Lane crossroads. Two of the remaining 3 accidents were right turn conflicts.

**Recommendations**

At the time of writing [July 2011] a scheme which will address signing and lining issues along this length is approaching completion. Close monitoring of the expected benefits of this will be

***Green Hill Road / Hill Top Road / Whingate  
Whingate Road / Wortley Road to St Mary's Hospital, Armley***

**Ref No. : LLR124    Rank this year : 38 (last : 24 )    Grid Ref: 426000 / 433650**

**Urban B road                      Length (Km) : 0.99    Flow (AADT): 11240**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	5	0	0	<b>5</b>
	2007	3	1	0	<b>4</b>
	2008	4	0	0	<b>4</b>
	2009	1	0	0	<b>1</b>
	2010	1	0	0	<b>1</b>
	<b>Total</b>	<b>14</b>	<b>1</b>	<b>0</b>	<b>15</b>

**Accident Rates (100MVkm)    Road Rate : 81    National Rate : 51    % of Norm : 159**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>7</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>40</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>20</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>7</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>7</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Nine of the accidents involved vehicles emerging from minor roads into the path of main road traffic, 3 of which were located at the junction with Hill End Crescent. The remaining accidents were comprised of various types, none of which occurred more than once.

**Recommendations**

A traffic calming scheme involving the provision of additional pedestrian refuges, central hatching and speed cushions installed in May 2011, the effects of which will be monitored.

***Lupton Avenue***  
***Torre Road to Harehills Lane, Burmantofts***

**Ref No. : LLR032    Rank this year : 39 (last : 55 )    Grid Ref: 432490 / 434170**

**Urban B road                      Length (Km) : 0.8    Flow (AADT): 12540**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	1	0	4
	2007	4	0	0	4
	2008	2	0	0	2
	2009	0	0	0	0
	2010	3	0	0	3
	<b>Total</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>13</b>

**Accident Rates (100MVkm)    Road Rate : 78    National Rate : 51    % of Norm : 153**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>8</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>23</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>8</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>31</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>0</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Five of the accidents were nose to tail collisions, with at least 3 of these involving vehicles poised to effect a turning manoeuvre. Four accidents involved pedestrian injury, with 3 of the pedestrian casualties being children aged 12 or younger and 2 being masked to the vehicles which hit them. The remaining 4 accidents were disparate events.

**Recommendations**

The previously high accident rate has been reduced from an annual average of 5.5 accidents per year, to 2.6 per year, by a traffic calming scheme, introduced before the current study period. Monitoring of this scheme will continue and no further action is currently indicated.

***A650 Drighlington By Pass  
A62 Gelderd Road to A58 Birkenshaw, Drighlington***

**Ref No. : LLR140    Rank this year : 40 (last : 40 )    Grid Ref: 423090 / 428000**

**Rural A road                      Length (Km) : 2.73    Flow (AADT): 19370**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	6	0	4	<b>10</b>
	2007	4	0	0	<b>4</b>
	2008	3	1	0	<b>4</b>
	2009	2	1	1	<b>4</b>
	2010	3	1	0	<b>4</b>
	<b>Total</b>	<b>18</b>	<b>3</b>	<b>5</b>	<b>26</b>

**Accident Rates (100MVkm)    Road Rate : 30    National Rate : 20    % of Norm : 150**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>31</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>42</b>	<b>33</b>	<b>39</b>
<u>Percentages for</u> <u>RURAL A Road</u> <i>Dark:</i>	<b>23</b>	<b>28</b>	<b>30</b>
<i>Pedestrian:</i>	<b>0</b>	<b>2</b>	<b>2</b>
<i>Skid:</i>	<b>46</b>	<b>33</b>	<b>38</b>

**Accident Analysis**

Seven of the accidents were loss of control events, 4 of which resulted in fatal injuries. The most common contributory factor within these accidents was travelling at excessive speed. Seven of the accidents were right turn conflicts, 4 of which were located at the junction with Wakefield Road. Six of the accidents were nose to tail collisions and 5 involved vehicles emerging from minor roads into the path of main road traffic. Clusters of accidents are located at the junctions with Wakefield Road (7) and Field Head Lane (5).

**Recommendations**

Improvement works, including resurfacing in early 2007 and a package of warning signs and carriageway markings in April 2008, were augmented in summer 2009 with the introduction of a 40 mph speed limit on the south eastern extent of the Length. The long term effects of these measures will continue to be annually reviewed.

***B6126 Town Street / Scott Green  
New Lane to College Road, Gildersome***

**Ref No. : LLR063    Rank this year : 41 (last : 34 )    Grid Ref: 424500 / 429200**

**Urban B road                      Length (Km) : 1.35    Flow (AADT): 7150**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	0	0	3
	2007	1	0	0	1
	2008	3	0	0	3
	2009	3	0	0	3
	2010	2	0	0	2
	<b>Total</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>12</b>

**Accident Rates (100MVkm)    Road Rate : 75    National Rate : 51    % of Norm : 147**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>0</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>42</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>42</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>8</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>0</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

No single accident type at this location recorded an annual average as high as a single event per year. By type, there were 3 cases each of; injury to bus passengers, nose to tail collisions and failure to give way. The final 3 accidents were all entirely disparate events.

**Recommendations**

The high wet surface and darkness rates suggest that a review of the standard of street lighting should be undertaken.

***Belle Isle Road***  
***Ring Road Middleton to East/West Grange Drive, Belle Isle***

**Ref No. : LLR010    Rank this year : 42 (last : 38 )    Grid Ref: 431300 / 429500**

**Urban B road                      Length (Km) : 1.8    Flow (AADT): 12600**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	6	0	0	<b>6</b>
	2007	5	2	0	<b>7</b>
	2008	8	1	0	<b>9</b>
	2009	3	1	0	<b>4</b>
	2010	2	0	0	<b>2</b>
	<b>Total</b>	<b>24</b>	<b>4</b>	<b>0</b>	<b>28</b>

**Accident Rates (100MVKm)    Road Rate : 74    National Rate : 51    % of Norm : 145**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>14</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>32</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>32</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>25</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>11</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Seven accidents involved pedestrian injury, with 6 of the casualties being children aged 6 to 14. A wide variety of causation factors were recorded in this grouping, including masking, drunkenness and at least two cases of pedestrians being injured by vehicles which left the carriageway. The remaining types included 6 cases of passengers falling inside buses, 4 nose to tail collisions and 3 instances each of turning conflicts and failure to give way types. The remaining 5 accidents were all disparate types. The accidents are generally dispersed throughout the length, with only minor clustering at the junctions with Aberfield Gate and Town Street.

**Recommendations**

This length has been subject to traffic calming initiatives at various times in the recent past. The most recent works undertaken, were zebra crossings, provided at the East / West Grange Drive junction in late 2009 and similar facilities at the junction with Windmill Road in 2010. A staggered, light controlled crossing facility is also proposed immediately to the south of the junction with Aberfield Gate. Further monitoring of the length will be maintained.

***A647 Stanningley Bypass***  
***Town End to Dawsons Corner, Stanningley***

**Ref No. : LLR045    Rank this year : 43 (last : 33 )    Grid Ref: 423000 / 434000**

**Rural A road                      Length (Km) : 4.5    Flow (AADT): 29260**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	15	1	2	<b>18</b>
	2007	12	0	1	<b>13</b>
	2008	5	1	2	<b>8</b>
	2009	11	2	0	<b>13</b>
	2010	9	2	0	<b>11</b>
	<b>Total</b>	<b>52</b>	<b>6</b>	<b>5</b>	<b>63</b>

**Accident Rates (100MVkm)    Road Rate : 29    National Rate : 20    % of Norm : 145**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>17</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>49</b>	<b>33</b>	<b>39</b>
<u>Percentages for</u> <u>RURAL A Road</u> <i>Dark:</i>	<b>27</b>	<b>28</b>	<b>30</b>
<i>Pedestrian:</i>	<b>5</b>	<b>2</b>	<b>2</b>
<i>Skid:</i>	<b>44</b>	<b>33</b>	<b>38</b>

**Accident Analysis**

Three distinct groupings continue to represent the majority of the recorded accidents. Twenty involved some form of loss of control and 17 involved either overtaking manoeuvres, or some form of lane changing conflict. There were also 15 nose to tail collisions, with most featuring excessive speed and/or sudden braking. Three of the remaining accidents involved pedestrian injury, with 2 of these casualties being fatally injured.

**Recommendations**

A feasibility study at this location is ongoing, with a view to reducing the risk of impact with roadside objects. It is anticipated that a scheme will be developed during the current financial year.

***Stanningley Road  
Swinnow Road to Elmfield Way, Bramley***

**Ref No. : LLR011    Rank this year : 44 (last : 42 )    Grid Ref: 424500 / 434450**

**Urban B road                      Length (Km) : 0.76    Flow (AADT): 13080**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	2	0	0	2
	2007	5	2	0	7
	2008	0	0	0	0
	2009	3	0	0	3
	2010	0	0	0	0
	<b>Total</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>12</b>

**Accident Rates (100MVkm)    Road Rate : 72    National Rate : 51    % of Norm : 141**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>17</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>17</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>33</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>25</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>8</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

With no accidents being recorded in 2011, the accident data remains unchanged from last year. No individual type recorded an annual average as high as 1 event per year. There were 3 pedestrian accidents, all of which occurred on the 120m section between Rossefield Approach and Ashby Crescent, and 2 of which involved masking. There were also 3 nose to tail collisions, 2 of which were associated with the pelican crossing to the west of Ashby Crescent. The remaining accidents were comprised of 2 loss of control events, both of which involved drink driving, and 4 entirely disparate types.

**Recommendations**

An in depth study of the accidents on this length was made in February 2010, since which time no further accidents have been recorded. The study failed to identify any notable accident pattern and no action was recommended.

***A58 Easterly Road***  
***East of Upland Drive to Oakwood Lane, Gipton Wood***

**Ref No. : LLR145    Rank this year : 45 (last : 52 )    Grid Ref: 432800 / 435950**

**Urban A road                      Length (Km) : 1.3    Flow (AADT): 18760**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	8	0	0	<b>8</b>
	2007	5	4	0	<b>9</b>
	2008	4	0	0	<b>4</b>
	2009	6	1	0	<b>7</b>
	2010	2	2	0	<b>4</b>
	<b>Total</b>	<b>25</b>	<b>7</b>	<b>0</b>	<b>32</b>

**Accident Rates (100MVkm)    Road Rate : 79    National Rate : 56    % of Norm : 141**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>22</b>	<b>12</b>	<b>13</b>
<u>Accident</u> <i>Wet:</i>	<b>50</b>	<b>28</b>	<b>32</b>
<u>Percentages for</u> <u>URBAN A Road</u> <i>Dark:</i>	<b>41</b>	<b>26</b>	<b>28</b>
<i>Pedestrian:</i>	<b>16</b>	<b>14</b>	<b>16</b>
<i>Skid:</i>	<b>16</b>	<b>14</b>	<b>14</b>

**Accident Analysis**

Eight of the accidents were nose to tail collisions. Seven of the accidents were loss of control events and 7 involved vehicles emerging from minor roads into the path of main road traffic. Five of the accidents involved pedestrians. The remaining accidents were comprised of various types, none of which occurred more than once.

**Recommendations**

An in depth accident study, undertaken in February 2008, identified the need for additional safety cameras to supplement the existing camera. The study also identified various other safety issues including the provision of deceleration lanes at the gaps in the central reservation, improved provision for cyclists, and the provision for off-street parking. The existing fixed safety camera was refurbished, and an additional camera was installed, on this length of road in June 2010. The effects of this will be monitored.

***North Parkway***  
***Seacroft Gate to Foundry Mill Gardens, Seacroft***

**Ref No. : LLR112    Rank this year : 46 (last : 45 )    Grid Ref: 434993 / 436361**

**Urban B road                      Length (Km) : 1.6    Flow (AADT): 7920**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	2	1	0	3
	2007	2	0	0	2
	2008	5	0	0	5
	2009	2	1	0	3
	2010	2	0	0	2
	<b>Total</b>	<b>13</b>	<b>2</b>	<b>0</b>	<b>15</b>

**Accident Rates (100MVkm)    Road Rate : 71    National Rate : 51    % of Norm : 139**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>13</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>33</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>40</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>13</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>13</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Eight of the accidents involved vehicles emerging into the path of main road traffic. The remaining accidents were comprised of various types, with only those involving pedestrians (2) occurring more than once. Clusters of accidents are located at the junctions with Ramshead Drive (4) and Seacroft Crescent (4), with each of these junctions having 3 accidents that involved vehicles emerging into the path of main road traffic.

**Recommendations**

A safety scheme which involved the introduction of one way working to the gaps in the central divide, chicanes, humps and cycle lanes, was completed at this location in July 2011. Close monitoring of the scheme will ensue.

***B6157 Bradford Road***  
***Ring Road Farsley to Richardshaw Lane, Stanningley***

**Ref No. : LLR064    Rank this year : 47 (last : 44 )    Grid Ref: 421480 / 434417**

**Urban B road                      Length (Km) : 1.02    Flow (AADT): 13990**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	1	1	0	2
	2007	6	2	0	8
	2008	1	0	0	1
	2009	1	2	0	3
	2010	3	0	0	3
	<b>Total</b>	<b>12</b>	<b>5</b>	<b>0</b>	<b>17</b>

**Accident Rates (100MVkm)    Road Rate : 71    National Rate : 51    % of Norm : 139**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>29</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>35</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>18</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>6</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>24</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Seven of the accidents involved vehicles emerging from minor roads into the path of main road traffic. Four of these occurred at the junction with Cote Lane and in each case, the offending vehicle was turning right as it exited the junction. There were also 3 nose to tail collisions and 2 cases each of collisions as parked vehicles set off into the path of passing traffic and right turn conflicts. The remaining accidents were comprised of entirely disparate types.

**Recommendations**

In July 2011, a scheme designed to formalise and manage on-street parking by means of waiting restrictions, incorporating sheltered parking within build-outs, and provide two informal pedestrian crossings was completed. Monitoring of this scheme will ensue.

***King Lane***  
***A6120 Ring Road to 100m north of Alwoodley Lane, Alwoodley***

**Ref No. : LLR138    Rank this year : 48 (last : 41 )    Grid Ref: 429080 / 439840**

**Urban B road                      Length (Km) : 2.27    Flow (AADT): 13120**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	5	1	0	<b>6</b>
	2007	8	0	0	<b>8</b>
	2008	6	2	0	<b>8</b>
	2009	7	1	0	<b>8</b>
	2010	3	0	1	<b>4</b>
	<b>Total</b>	<b>29</b>	<b>4</b>	<b>1</b>	<b>34</b>

**Accident Rates (100MVkm)    Road Rate : 68    National Rate : 51    % of Norm : 133**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>15</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>32</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>26</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>12</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>21</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Eight of the accidents were nose to tail collisions and 7 involved vehicles emerging from minor roads into the path of main road traffic. Five of the accidents were loss of control events, 4 involved pedestrians and 3 involved falling PSV passengers. The remaining accidents were comprised of numerous types, none of which occurred more than once.

**Recommendations**

In March 2008 waiting restrictions were introduced in the vicinity of the junction with The Avenue, with a view to improving the sightlines. This length has been an established site for mobile safety cameras since May 2011, the effects of which will be monitored.

***B6137 Leeds Road***  
***300m west of Brexdale Avenue to Church Lane, Kippax***

**Ref No. : LLR082    Rank this year : 49 (last : 61 )    Grid Ref: 441100 / 430900**

**Urban B road                      Length (Km) : 1.7    Flow (AADT): 8930**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	1	0	4
	2007	1	0	0	1
	2008	2	0	0	2
	2009	3	2	0	5
	2010	5	0	0	5
	<b>Total</b>	<b>14</b>	<b>3</b>	<b>0</b>	<b>17</b>

**Accident Rates (100MVkm)    Road Rate : 67    National Rate : 51    % of Norm : 131**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>18</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>18</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>29</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>24</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>12</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

The accident pattern remains mixed, with no single type recording an annual average as high as 1 event per year. Four accidents involved pedestrian injury, with 2 of the casualties being teenagers. Like the remaining types, the pedestrian accidents were distributed randomly along the length. There were also 3 right turn conflicts and 2 cases each of nose to tail collisions, falling PSV passengers, failure to give way, and collisions with parked vehicles or stationary objects. There were also 2 disparate types.

**Recommendations**

A pelican crossing was introduced at the junction of Brecks Lane / Brexdale Avenue in April 2011. Monitoring of the effects of this and the performance of the length in general will be maintained.

***A642 Aberford Road  
Calverley Road to Bullerthorpe Lane, Oulton***

**Ref No. : LLR065    Rank this year : 50 (last : 37 )    Grid Ref: 436800 / 428900**

**Urban A road                      Length (Km) : 1.58    Flow (AADT): 13670**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	6	1	0	7
	2007	5	2	0	7
	2008	4	1	0	5
	2009	5	1	0	6
	2010	1	0	0	1
	<b>Total</b>	<b>21</b>	<b>5</b>	<b>0</b>	<b>26</b>

**Accident Rates (100MVkm)    Road Rate : 72    National Rate : 56    % of Norm : 129**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>19</b>	<b>12</b>	<b>13</b>
<u>Accident</u> <i>Wet:</i>	<b>23</b>	<b>28</b>	<b>32</b>
<u>Percentages for</u> <u>URBAN A Road</u> <i>Dark:</i>	<b>19</b>	<b>26</b>	<b>28</b>
<i>Pedestrian:</i>	<b>8</b>	<b>14</b>	<b>16</b>
<i>Skid:</i>	<b>12</b>	<b>14</b>	<b>14</b>

**Accident Analysis**

Nine accidents involved nose to tail collisions, with 6 of these being recorded in the two most recent study years. Most were associated with stationary or queuing traffic. There were also 5 right turn conflicts and 4 cases of vehicles emerging into the path of main road traffic. These were located at the various intersections and accesses along the length. Other than 2 instances of pedestrian injury, the remaining accidents were all disparate events. Single figure annual totals have become the norm since the opening of the A1/M1 link road.

**Recommendations**

A pelican crossing facility and associated works were introduced in the vicinity of the junction with Fleet Lane in early 2011. This will be monitored along with the rest of the length, with encouragement provided by the low accident total of 2010.

***Main Street / Fall Lane / Stanhope Road  
Chapel Street to Dolphin Lane, East Ardsley***

**Ref No. : LLR135    Rank this year : 51 (last : 39 )    Grid Ref: 430940 / 425740**

**Urban B road                      Length (Km) : 1.6    Flow (AADT): 5810**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	2	1	0	3
	2007	3	0	0	3
	2008	1	0	0	1
	2009	1	0	0	1
	2010	1	1	0	2
	<b>Total</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>

**Accident Rates (100MVkm)    Road Rate : 65    National Rate : 51    % of Norm : 127**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>20</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>30</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>20</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>10</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>20</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

The accidents on this length of road were comprised of various types with only loss of control events, with 2 instances, occurring more than once.

**Recommendations**

A traffic calming scheme was introduced along this length of road in 2008, the long term effects of which will continue to be annually reviewed.

***Town Street***  
***Middleton Park Road to Belle Isle Road, Middleton***

**Ref No. : LLR028    Rank this year : 52 (last : 56 )    Grid Ref: 430300 / 428500**

**Urban B road                      Length (Km) : 2.1    Flow (AADT): 4850**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	4	0	0	4
	2007	0	1	0	1
	2008	1	1	0	2
	2009	1	1	0	2
	2010	2	0	0	2
	<b>Total</b>	<b>8</b>	<b>3</b>	<b>0</b>	<b>11</b>

**Accident Rates (100MVKm)    Road Rate : 65    National Rate : 51    % of Norm : 127**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>27</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>18</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>27</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>18</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>9</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

An extremely mixed accident pattern, with 3 cases each of pedestrian injury, loss of control events and right turn conflicts. The remaining 5 accidents were all disparate types. There was no discernible clustering, although 6 accidents occurred between the junctions with Sharp Lane and

**Recommendations**

The severity ratio remains high, although all 3 serious accidents were disparate types. At the time of writing [July] no accidents have been recorded in 2011 and it is likely that this length will not feature in next year's edition of this report.

***A659 Arthington Lane / Otley Road***  
***East of Arthington village to A61 Harrogate Road, Arthington***

**Ref No. : LLR134    Rank this year : 53 (last : 49 )    Grid Ref: 429970 / 445290**

**Rural A road                      Length (Km) : 3.8    Flow (AADT): 6520**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	1	1	1	<b>3</b>
	2007	0	0	0	<b>0</b>
	2008	1	1	0	<b>2</b>
	2009	3	1	0	<b>4</b>
	2010	1	0	0	<b>1</b>
	<b>Total</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>10</b>

**Accident Rates (100MVkm)    Road Rate : 24    National Rate : 20    % of Norm : 120**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>40</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>20</b>	<b>33</b>	<b>39</b>
<u>Percentages for</u> <u>RURAL A Road</u> <i>Dark:</i>	<b>50</b>	<b>28</b>	<b>30</b>
<i>Pedestrian:</i>	<b>0</b>	<b>2</b>	<b>2</b>
<i>Skid:</i>	<b>50</b>	<b>33</b>	<b>38</b>

**Accident Analysis**

Six of the accidents were loss of control events. All 6 of the loss of control events occurred on bends and 5 involved vehicles travelling at excessive speed. Two of the accidents were head on collisions and 2 involved vehicles emerging from minor roads into the path of main road traffic.

**Recommendations**

A scheme to improve the signing and lining on the bends towards the western extent of the length was commenced in June 2011, the signing aspect of this scheme is complete, with lining due for completion before the end of 2011. Monitoring of this scheme will be maintained.

***A6120 Ring Road***  
***Dawsons Corner to Rodley Lane, Farsley***

**Ref No. : LLR062    Rank this year : 54 (last : 47 )    Grid Ref: 420300 / 435500**

**Rural A road                      Length (Km) : 2.36    Flow (AADT): 28420**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	7	1	0	8
	2007	5	0	0	5
	2008	3	0	0	3
	2009	7	1	0	8
	2010	3	0	0	3
	<b>Total</b>	<b>25</b>	<b>2</b>	<b>0</b>	<b>27</b>

**Accident Rates (100MVkm)    Road Rate : 24    National Rate : 20    % of Norm : 120**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	7	21	21
<u>Accident</u> <i>Wet:</i>	26	33	39
<u>Percentages for</u> <u>RURAL A Road</u> <i>Dark:</i>	11	28	30
<i>Pedestrian:</i>	4	2	2
<i>Skid:</i>	19	33	38

**Accident Analysis**

The largest single accident grouping involved nose to tail collisions with 15 occurrences, with most of these distributed throughout the length and commonly being recorded during periods of congestion or when traffic was moving slowly. The other accidents consisted of a variety of types, although 6 involved failure to give way, with 4 of these occurring at the junction with Calverley Lane and each involving an illegal turning manoeuvre. Amongst the remaining, otherwise disparate types were 2 U-turning conflicts.

**Recommendations**

The introduction of safety cameras on this length has had a moderate beneficial effect on the overall accident rate, with a particular reduction in severity. A reduction in the existing accident level at the junction with Calverley Lane would have a positive effect on the rate for the entire length and a scheme is currently being designed which will attempt to achieve this, by means of a redesigned kerbline, intending to better enforce the compulsory left turn into the Ring Road. When constructed, this scheme will be subject to close monitoring.

***B6154 Tong Road***  
***Whingate to Oldfield Lane, Wortley***

**Ref No. : LLR008    Rank this year : 55 (last : 59 )    Grid Ref: 427400 / 432900**

**Urban B road                      Length (Km) : 1.5    Flow (AADT): 16870**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	5	0	0	<b>5</b>
	2007	5	2	0	<b>7</b>
	2008	6	0	0	<b>6</b>
	2009	1	0	0	<b>1</b>
	2010	4	2	0	<b>6</b>
	<b>Total</b>	<b>21</b>	<b>4</b>	<b>0</b>	<b>25</b>

**Accident Rates (100MVKm)    Road Rate : 59    National Rate : 51    % of Norm : 116**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>16</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>24</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>24</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>24</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>0</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Eight of the accidents involved some kind of turning conflict. Three of these occurred at the junction with Wesley Road. There were also 6 cases of pedestrian injury, with the most recent 2 of these casualties being very elderly and a further 2 being injured by vehicles which mounted the footpath. Four accidents involved injury to PSV passengers and there were 3 nose to tail collisions. The remaining accidents were all entirely disparate types.

**Recommendations**

The effect of Safety Cameras, introduced prior to the current study period, has helped reduce the previously very high accident levels. A Pelican crossing at the junction with St Mary's Close, was switched on in early April 2011. Further monitoring of this length will be maintained.

***Barwick Road***  
***Ring Road to 100m NE of Smeaton Approach, Stanks***

**Ref No. : LLR021    Rank this year : 56 (last : 0 )    Grid Ref: 436800 / 435700**

**Urban B road                      Length (Km) : 1.3    Flow (AADT): 7940**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	0	1	0	1
	2007	1	0	0	1
	2008	2	0	0	2
	2009	2	0	0	2
	2010	4	0	0	4
	<b>Total</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>10</b>

**Accident Rates (100MVkm)    Road Rate : 58    National Rate : 51    % of Norm : 114**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>10</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>40</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>20</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>20</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>0</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

A mixed group of accidents, with no distinct pattern. There were 2 cases each of nose to tail collisions, pedestrian injury and injury to pedal cyclists who were riding on, or from, the footway. The remaining 4 accidents were all entirely disparate events.

**Recommendations**

It is speculated that the higher figure recorded in 2010 is a random statistical fluctuation. Thus, continued monitoring only is currently recommended.

***A654 Thorpe Lane / Middleton Lane  
Thorpe Garth to Winthorpe Avenue, Thorpe***

**Ref No. : LLR088    Rank this year : 57 (last : 46 )    Grid Ref: 430000 / 427000**

**Urban A road                      Length (Km) : 1.3    Flow (AADT): 9380**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	1	0	0	1
	2007	3	0	0	3
	2008	2	1	0	3
	2009	1	4	0	5
	2010	1	0	0	1
	<b>Total</b>	<b>8</b>	<b>5</b>	<b>0</b>	<b>13</b>

**Accident Rates (100MVkm)    Road Rate : 64    National Rate : 56    % of Norm : 114**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>38</b>	<b>12</b>	<b>13</b>
<u>Accident</u> <i>Wet:</i>	<b>23</b>	<b>28</b>	<b>32</b>
<u>Percentages for</u> <u>URBAN A Road</u> <i>Dark:</i>	<b>31</b>	<b>26</b>	<b>28</b>
<i>Pedestrian:</i>	<b>31</b>	<b>14</b>	<b>16</b>
<i>Skid:</i>	<b>31</b>	<b>14</b>	<b>14</b>

**Accident Analysis**

There were 4 cases of pedestrian injury, with all the casualties being children aged 11-14. Three accidents involved failure to give way, with a similar number of nose to tail collisions. Two of the remaining 3 accidents were loss of control events. There is a small cluster of 3 accidents, including 2 pedestrian types, at the junction with Wynthorpe Avenue.

**Recommendations**

Although the severity rate is high, there is no pattern to the serious accidents. Annual totals are generally moderate and further monitoring only is currently recommended.

*Queensway*  
*Town Street to Kirk Lane, Yeadon*

*Ref No. : LLR075 Rank this year : 58 (last : 51 ) Grid Ref: 420000 / 441700*

*Urban B road Length (Km) : 1.7 Flow (AADT): 10400*

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	0	0	3
	2007	3	1	0	4
	2008	3	0	0	3
	2009	3	1	0	4
	2010	3	0	0	3
	<i>Total</i>	<b>15</b>	<b>2</b>	<b>0</b>	<b>17</b>

Accident Rates (100MVkm) *Road Rate : 58 National Rate : 51 % of Norm : 114*

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>12</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>41</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>47</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>24</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>12</b>	<b>11</b>	<b>14</b>

Accident Analysis

There were 4 cases each of pedestrian injury and nose to tail collisions. Of the remaining accidents, 3 involved falling PSV passengers and there were 2 collisions between moving and parked vehicles. The final 4 accidents were all disparate types.

Recommendations

Annual totals are moderate, but the proportion of accidents occurring in darkness, or on a wet surface, remains high. Consideration should be given to a review of the standard of street lighting and the quality of the road surface.

***Stonegate Road***  
***Harrogate Road to Green Road, Meanwood***

**Ref No. : LLR128    Rank this year : 59 (last : 58 )    Grid Ref: 429700 / 438290**

**Urban B road                      Length (Km) : 2.94    Flow (AADT): 12530**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	6	3	0	<b>9</b>
	2007	6	0	0	<b>6</b>
	2008	10	0	0	<b>10</b>
	2009	4	0	0	<b>4</b>
	2010	6	0	0	<b>6</b>
	<b>Total</b>	<b>32</b>	<b>3</b>	<b>0</b>	<b>35</b>

**Accident Rates (100MVkm)    Road Rate : 57    National Rate : 51    % of Norm : 112**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>9</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>23</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>17</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>17</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>11</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Six of the accidents involved vehicles failing to give way at junctions. Five of the accidents involved pedestrians, 5 were nose to tail collisions and 5 were right turn conflicts. Four of the accidents were loss of control events and 4 involved falling PSV passengers. The remaining accidents were comprised of various types, all of which occurred in low numbers. Clusters of accidents are located at the junctions with King Lane (9) and Stainbeck Lane (6).

**Recommendations**

A pelican crossing was provided in May 2006, in the vicinity of Parkland Drive and a series of pedestrian refuges were completed in autumn 2006. Whilst a reduction in the existing 40 mph speed limit may appear desirable, recorded mean speeds suggest this is not currently appropriate. It is recommended that this length continue to be annually reviewed.

***Morris Lane / Spen Lane***  
***Queenswood Drive to Kirkstall Lane, Kirkstall***

**Ref No. : LLR071    Rank this year : 60 (last : 0 )    Grid Ref: 426600 / 436500**

**Urban B road                      Length (Km) : 1.6    Flow (AADT): 12030**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	1	2	0	3
	2007	2	0	0	2
	2008	4	0	0	4
	2009	3	0	0	3
	2010	5	1	0	6
	<b>Total</b>	<b>15</b>	<b>3</b>	<b>0</b>	<b>18</b>

**Accident Rates (100MVkm)    Road Rate : 56    National Rate : 51    % of Norm : 110**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>17</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>33</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>22</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>11</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>11</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Six of the accidents were nose to tail collisions, with 4 of this number occurring as the struck vehicle was poised to effect a right turn manoeuvre. There were also 4 instances of failure to give way and 3 loss of control events. The remaining 5 accidents consisted of 2 cases each of pedestrian injury, and cars turning right across the path of overtaking motorcycles, and a pedal cyclist hitting a parked car. The accidents are evenly distributed throughout the length, with no notable clustering.

**Recommendations**

Resurfacing works and minor alterations to an earlier traffic calming scheme, completed prior to the current study period have resulted in generally low annual totals. It is expected that the higher figure recorded in 2010 is a statistical anomaly and it is recommended that the length continue to be monitored.

***Queenswood Drive***  
***Kirkstall Lane to Spen Lane, Kirkstall***

**Ref No. : LLR087    Rank this year : 61 (last : 57 )    Grid Ref: 426600 / 436500**

**Urban B road                      Length (Km) : 1.8    Flow (AADT): 10730**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	4	1	0	5
	2007	3	1	0	4
	2008	3	1	0	4
	2009	3	0	0	3
	2010	1	1	0	2
	<b>Total</b>	<b>14</b>	<b>4</b>	<b>0</b>	<b>18</b>

**Accident Rates (100MVkm)    Road Rate : 56    National Rate : 51    % of Norm : 110**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>22</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>44</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>44</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>22</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>6</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Five of the accidents involved vehicular loss of control, with excess alcohol, excessive speed and fatigue being amongst the cited contributory factors. There were also 4 pedestrian accidents, with all the casualties being aged 16 or younger. There were 3 instances each of failure to give way and nose to tail collisions, with 2 of the remaining 3 accidents being turning conflicts.

**Recommendations**

A traffic calming scheme, including junction plateaux, speed cushions, road humps, and road narrowing, completed in October 2006 has proved unable to satisfactorily reduce vehicular speeds. Mobile safety cameras have thus been deployed since March 2011 and a further traffic calming scheme is being drawn up, in a bid to address the issue.

***Bayton Lane***  
***Victoria Avenue to Layton Road, Horsforth***

**Ref No. : LLR007    Rank this year : 62 (last : 0 )    Grid Ref: 422600 / 440000**

**Rural B road                      Length (Km) : 2    Flow (AADT): 8800**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	2	0	1	3
	2007	2	1	0	3
	2008	1	0	0	1
	2009	2	0	0	2
	2010	1	1	0	2
	<b>Total</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>11</b>

**Accident Rates (100MVkm)    Road Rate : 38    National Rate : 35    % of Norm : 109**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>27</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>45</b>	<b>36</b>	<b>43</b>
<u>Percentages for</u> <u>RURAL B Road</u> <i>Dark:</i>	<b>64</b>	<b>27</b>	<b>30</b>
<i>Pedestrian:</i>	<b>9</b>	<b>4</b>	<b>3</b>
<i>Skid:</i>	<b>55</b>	<b>35</b>	<b>41</b>

**Accident Analysis**

At least 7 of the accidents involved vehicular loss of control, with excessive speed and slippery surfaces cited as being contributory in several. Whilst the remaining 4 accidents were essentially disparate, 2 of these resulted in head on collisions. The percentages of accidents that occurred in the dark, in wet conditions, or in which a vehicle skidded, are all significantly higher than the level which could be expected for this type of road. Despite a similarly high pedestrian figure, only 1 casualty of this class was recorded.

**Recommendations**

A scheme designed to highlight the road's centre line with reflective road studs and provide enhanced advance warning signing was completed in September 2010. The effects of these works will be monitored.

***Brownberrie Lane***  
***North Road to Station Road, Horsforth***

**Ref No. : LLR117    Rank this year : 63 (last : 63 )    Grid Ref: 423922 / 439146**

**Urban B road                      Length (Km) : 0.6    Flow (AADT): 18270**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	2	0	0	<b>2</b>
	2007	2	0	0	<b>2</b>
	2008	2	1	0	<b>3</b>
	2009	0	0	0	<b>0</b>
	2010	2	1	0	<b>3</b>
	<b>Total</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>

**Accident Rates (100MVkm)    Road Rate : 55    National Rate : 51    % of Norm : 108**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>20</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>40</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>60</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>30</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>20</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Six accidents involved vehicular loss of control, with, in 2 cases, the vehicle leaving the carriageway and striking a pedestrian. The remaining accidents involved 2 nose to tail collisions a failure to give way type and a further case of pedestrian injury.

**Recommendations**

In June 2010, a scheme was completed which involved narrowing the carriageway of Brownberrie Lane at the south eastern extent, to facilitate widening of the footway. A pelican crossing was also introduced, along with a vehicle actuated sign, intended to reduce speeds. The longer term effects of these measures will continue to be monitored.

***A660 Otley Road  
Kingsley Drive to Kings Road, Golden Acre Park***

**Ref No. : LLR048    Rank this year : 64 (last : 43 )    Grid Ref: 426600 / 441500**

**Rural A road                      Length (Km) : 2.1    Flow (AADT): 16600**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	2	1	0	3
	2007	1	1	0	2
	2008	3	0	0	3
	2009	2	2	0	4
	2010	0	0	0	0
	<b>Total</b>	<b>8</b>	<b>4</b>	<b>0</b>	<b>12</b>

**Accident Rates (100MVkm)    Road Rate : 21    National Rate : 20    % of Norm : 105**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>33</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>42</b>	<b>33</b>	<b>39</b>
<u>Percentages for</u> <u>RURAL A Road</u> <i>Dark:</i>	<b>42</b>	<b>28</b>	<b>30</b>
<i>Pedestrian:</i>	<b>17</b>	<b>2</b>	<b>2</b>
<i>Skid:</i>	<b>17</b>	<b>33</b>	<b>38</b>

**Accident Analysis**

Three accidents involved vehicular loss of control, with 2 of these occurring when a vehicle hit standing water on the carriageway. There were also 2 instances each of nose to tail collisions and injury to pedestrians, with both of the latter casualties being masked by buses at the time of the accident. The remaining 5 accidents were comprised of various types, all of which registered single

**Recommendations**

A feasibility study has been completed on a scheme which will introduce cycle lanes, with the associated effect of narrowing the carriageway width for motorists. The scheme will be introduced in the current financial year and should address issues of vehicular speed and prove beneficial to the accident rate.

## *A656 Roman Ridge*

### *South of Peckfield roundabout to 200m north of Park Lane, Ledston*

**Ref No. : LLR054 Rank this year : 65 (last : 53 ) Grid Ref: 443000 / 430000**

**Rural A road Length (Km) : 3.38 Flow (AADT): 10090**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	1	1	0	2
	2007	1	3	0	4
	2008	2	0	1	3
	2009	0	1	0	1
	2010	2	0	0	2
	<b>Total</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>12</b>

**Accident Rates (100MVkm) Road Rate : 21 National Rate : 20 % of Norm : 105**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>50</b>	<b>21</b>	<b>21</b>
<u>Accident</u> <i>Wet:</i>	<b>8</b>	<b>33</b>	<b>39</b>
<u>Percentages for</u> <u>RURAL A Road</u> <i>Dark:</i>	<b>33</b>	<b>28</b>	<b>30</b>
<i>Pedestrian:</i>	<b>0</b>	<b>2</b>	<b>2</b>
<i>Skid:</i>	<b>8</b>	<b>33</b>	<b>38</b>

#### Accident Analysis

An extremely mixed pattern of accidents, with 3 involving some kind of negligent overtaking manoeuvre and a similar number involving vehicles veering into the path of others. There were also 2 cases each of right turn conflicts, pedal cycles being ridden into the carriageway from the footpath, and disparate types.

#### Recommendations

Two fixed safety cameras were provided in the vicinity of Ledston Luck during 2010. At the time of writing [July] no accidents have been recorded in 2011 and monitoring of future performance will be maintained.

***A61 Harrogate Road***  
***A6120 Ring Road to Alwoodley Gates, Moor Allerton***

**Ref No. : LLR116    Rank this year : 66 (last : 60 )    Grid Ref: 430990 / 440210**

**Urban A road                      Length (Km) : 1.85    Flow (AADT): 18000**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	4	2	0	<b>6</b>
	2007	7	1	0	<b>8</b>
	2008	8	1	0	<b>9</b>
	2009	5	0	0	<b>5</b>
	2010	4	1	0	<b>5</b>
	<b>Total</b>	<b>28</b>	<b>5</b>	<b>0</b>	<b>33</b>

**Accident Rates (100MVkm)    Road Rate : 59    National Rate : 56    % of Norm : 105**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>15</b>	<b>12</b>	<b>13</b>
<u>Accident</u> <i>Wet:</i>	<b>24</b>	<b>28</b>	<b>32</b>
<u>Percentages for</u> <u>URBAN A Road</u> <i>Dark:</i>	<b>18</b>	<b>26</b>	<b>28</b>
<i>Pedestrian:</i>	<b>15</b>	<b>14</b>	<b>16</b>
<i>Skid:</i>	<b>9</b>	<b>14</b>	<b>14</b>

**Accident Analysis**

Nine accidents involved vehicles emerging from minor roads into the path of main road traffic. There were also 5 cases of pedestrian injury with a mixture of ages, excluding the elderly, recorded. The remaining types included 4 loss of control events, the majority being single vehicle events along with an assortment of signal violations, nose to tail collisions, right turn conflicts, lane changing events and other, mainly vehicular events, which all registered low totals. No single location featured an accident cluster with an average rate as high as a single event per year.

**Recommendations**

Mobile safety cameras have been in operation on this length throughout the current study period and in November 2010, a scheme involving closure of several central reserve gaps, the introduction of improved turning facilities, the provision of hard standings for safety camera enforcement and street lighting improvements, was completed. Close monitoring of these works will be maintained.

***Middleton Park Road***  
***Helston Green to Sharp Lane Roundabout, Middleton***

**Ref No. : LLR005    Rank this year : 67 (last : 64 )    Grid Ref: 430400 / 428100**

**Urban B road                      Length (Km) : 1.84    Flow (AADT): 10890**

<u>Accident Record</u>	<i>Year</i>	<i>Slight</i>	<i>Serious</i>	<i>Fatal</i>	<i>Total</i>
	2006	3	0	0	<b>3</b>
	2007	3	1	0	<b>4</b>
	2008	0	1	0	<b>1</b>
	2009	4	2	0	<b>6</b>
	2010	0	3	0	<b>3</b>
	<b>Total</b>	<b>10</b>	<b>7</b>	<b>0</b>	<b>17</b>

**Accident Rates (100MVkm)    Road Rate : 51    National Rate : 51    % of Norm : 100**

	<i>This Road</i>	<i>District</i>	<i>County</i>
<i>Severity Ratio:</i>	<b>41</b>	<b>13</b>	<b>14</b>
<u>Accident</u> <i>Wet:</i>	<b>29</b>	<b>27</b>	<b>31</b>
<u>Percentages for</u> <u>URBAN B Road</u> <i>Dark:</i>	<b>29</b>	<b>27</b>	<b>27</b>
<i>Pedestrian:</i>	<b>18</b>	<b>23</b>	<b>23</b>
<i>Skid:</i>	<b>29</b>	<b>11</b>	<b>14</b>

**Accident Analysis**

Five of the accidents involved falling PSV passengers, 4 of whom were elderly and a further 5 were overtaking conflicts of some kind. The only other noteworthy grouping was pedestrian injury with 3 cases. The remaining 4 accidents were all disparate types. Six of the 7 high severity accidents involved two wheeled vehicles.

**Recommendations**

Whilst the accidents on this length of road form a mixed pattern, with no one type being dominant, and the rate is close to the level which could be expected, the very high severity ratio gives cause for concern. The length is subject to control by fixed safety cameras, but further investigation is required to assess whether these remain appropriate.

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