# Transport for London Surface Transport

Fact sheet

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London Road Safety Unit LAAU topic 2009-1

January 2009

# **Pedestrian casualties in Greater London**

This factsheet looks into the scale and nature of road traffic collisions resulting in injury to pedestrians in the Greater London area. It gives an overview of pedestrian casualties for the period 1986 to 2007 and then looks in detail at the profile of casualties and factors relating to the collisions that occurred in 2007 (the latest year for which finalised data are available at the time of writing).

It provides background information to support the Government and Mayor for London's targets to reduce road casualties by the year 2010. Following a review in 2006, the target in London for pedestrians is now a 50% reduction in the total number of pedestrians killed or seriously injured (KSI) by 2010 from a baseline of the average number of casualties for 1994-98.

The data provided is for personal injury road traffic collisions that occurred on the public highway and were reported to the police in accordance with the *Stats 19* national reporting system.

# Key facts

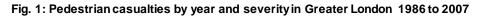
- 22% of all road traffic collisions in Greater London in 2007 resulted in injury to pedestrians who, in turn, represented 19% of all casualties.
- Pedestrian KSI casualties accounted for just over one third (34%) of all KSI casualties in 2007.
- Pedestrian KSIs have fallen by 40% between the 1994-98 average and 2007; all pedestrian casualties have fallen by 43%.
- Children (0-15 years inclusive) accounted for nearly one quarter (24%) of pedestrian casualties of known age in 2007.
- Over half (51%) of pedestrian fatalities of known age in 2007 were aged 60 years or over.
- Two thirds (67%) of pedestrian casualties were injured by a car.

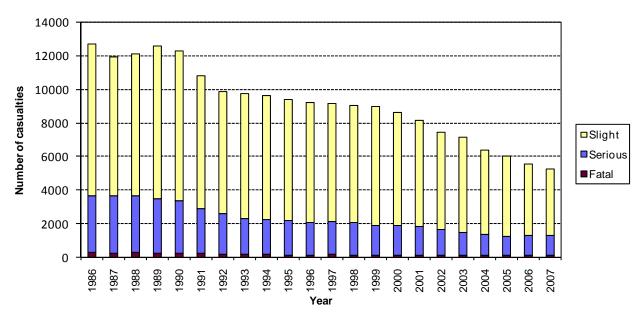
# Annual Trends 1986 to 2007

Table 1 and Figure 1 show the number of pedestrian casualties by year and severity in Greater London from 1986 to 2007.

	Ped	Sev	verity of case	ualty			Severity
Year of accident	Collisions	Fatal	Serious	Slight	Total	KSI Total	ratio
1986	12,291	293	3,395	9,009	12,697	3,688	29%
1987	11,596	265	3,408	8,267	11,940	3,673	31%
1988	11,731	271	3,406	8,407	12,084	3,677	30%
1989	12,231	259	3,254	9,072	12,585	3,513	28%
1990	11,926	235	3,146	8,898	12,279	3,381	28%
1991	10,504	217	2,681	7,929	10,827	2,898	27%
1992	9,565	189	2,385	7,294	9,868	2,574	26%
1993	9,453	171	2,135	7,418	9,724	2,306	24%
1994	9,373	160	2,098	7,360	9,618	2,258	23%
1995	9,169	119	2,051	7,245	9,415	2,170	23%
1996	8,974	122	1,935	7,160	9,217	2,057	22%
1997	8,898	160	1,982	7,032	9,174	2,142	23%
1998	8,765	119	1,937	6,979	9,035	2,056	23%
1994 to 1998 average	9,035.8	136.0	2,000.6	7,155.2	9,291.8	2,136.6	23%
1999	8,736	134	1,728	7,139	9,001	1,862	21%
2000	8,341	140	1,730	6,753	8,623	1,870	22%
2001	7,886	128	1,676	6,339	8,143	1,804	22%
2002	7,225	107	1,539	5,811	7,457	1,646	22%
2003	6,898	119	1,380	5,628	7,127	1,499	21%
2004	6,200	92	1,242	5,042	6,376	1,334	21%
2005	5,840	89	1,135	4,799	6,023	1,224	20%
2006	5,383	100	1,203	4,238	5,541	1,303	24%
2007	5,089	109	1,183	3,960	5,252	1,292	25%
% change 1986 to 2007	-59%	-63%	-65%	-56%	-59%	-65%	-
% change 1994-98 average to 2007	-44%	-20%	-41%	-45%	-43%	-40%	-
% change 2006 to 2007	-5%	9%	-2%	-7%	-5%	-1%	-

Table 1: Pedestrian casualties by year and severity in Greater London 1986 to 2007





2 London Road Safety Unit

Pedestrian casualties were at a high of 12,697 in 1986, fell to 11,940 in 1987 and then rose again to 12,585 in 1989. From that point onwards they have fallen steadily year on year to a low of 5,252 in 2007, a reduction of 59% compared with 1986. KSI casualties fell by 65% and slight by 56% during this period.

Comparing 2007 with the 1994-98 average, all pedestrian casualties fell by 43%, fatal injuries by 20%, serious by 41% and slight by 45%. Pedestrian KSIs fell by 40% overall.

Comparing 2007 with 2006, pedestrian casualties fell by 5% overall. There were reductions in serious and slight severities of 2% and 7% respectively, however pedestrian fatalities rose by 9% (100 to 109). Year on year fluctuations in fatalities are not uncommon and numbers have varied from a high of 293 in 1986 to a low of 89 in 2005, averaging 164 per year during this period. Pedestrian KSIs fell by 1% between 2006 and 2007.

The severity ratio (the percentage of fatal and serious injuries to all injuries) was showing a general downwards trend, falling from a high of 31% in 1987 to a low of 20% in 2005. However, due to the rise in KSI casualties in 2006 and in fatalities in 2007, the severity ratio has risen slightly over the last two years (24% and 25% respectively).

#### Gender

Figure 2 shows pedestrian casualties by gender in Greater London from 1986 to 2007.

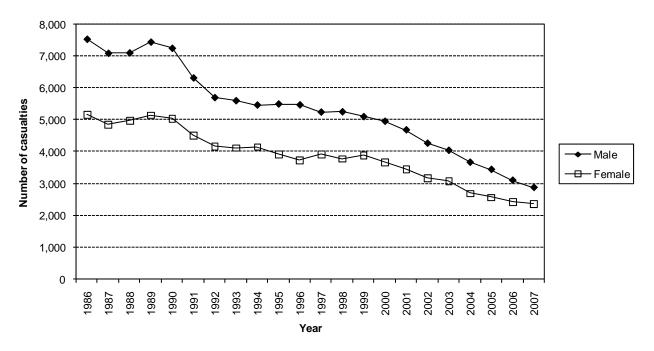


Fig. 2: Pedestrian casualties by year and gender in Greater London 1986 to 2007

Males accounted for an average of 58% of pedestrian casualties per year over this period and females 42%. The male-female split remained fairly constant during this time, although the last couple of years have shown a slight increase in the proportion of female pedestrian casualties, with 45% female to 55% male in 2007.

Both male and female pedestrian casualties have shown a general downward trend since 1986, reducing by 62% and 54% respectively between 1986 and 2007, and by 46% and 39% respectively between the 1994-98 average and 2007. Males fell by 7% and females by 3% between 2006 and 2007.

### Age

Table 2 and Figure 3 show pedestrian casualties by year and age band in Greater London from 1986 to 2007.

While casualty numbers have fallen in each of the age bands, this is most pronounced in the youngest (under 16 years) and oldest (60 years and over) bands, with reductions of 67% and 69% respectively between 1986 and 2007 and 55% and 47% respectively between the 1994-98 average and 2007.

The distribution of pedestrian casualties across these age bands has changed slightly over this period. The under 16 and 60 plus age bands decreased from 28% and 17% of the total in 1986 to 23% and 13% respectively in 2007, while the proportion of casualties in the 25-59 year age band increased from 30% in 1986 to 40% in 2007. The percentage of casualties in the 16 to 24 year age band has remained fairly constant.

	Ca	Casualty age banded						% aged	% aged	% aged
	Under 16	16-24	25-59 6	60 + over U	nknown	Total	< 16	16-24	25-59	60+
1986	3,565	2,152	3,785	2,204	991	12,697	28%	17%	30%	17%
1987	3,196	2,247	3,698	1,984	815	11,940	27%	19%	31%	17%
1988	3,282	2,077	3,828	2,067	830	12,084	27%	17%	32%	17%
1989	3,424	2,198	3,966	2,047	950	12,585	27%	17%	32%	16%
1990	3,540	2,023	3,855	1,958	903	12,279	29%	16%	31%	16%
1991	3,078	1,630	3,473	1,802	844	10,827	28%	15%	32%	17%
1992	2,935	1,404	3,268	1,556	705	9,868	30%	14%	33%	16%
1993	2,736	1,359	3,274	1,656	699	9,724	28%	14%	34%	17%
1994	2,748	1,361	3,196	1,436	877	9,618	29%	14%	33%	15%
1995	2,637	1,358	3,241	1,318	861	9,415	28%	14%	34%	14%
1996	2,601	1,358	3,343	1,250	665	9,217	28%	15%	36%	14%
1997	2,561	1,421	3,365	1,280	547	9,174	28%	15%	37%	14%
1998	2,531	1,408	3,373	1,224	499	9,035	28%	16%	37%	14%
1994 to 1998 average	2,615.6	1,381	3,303.6	1301.6	689.8	9,291.8	28%	15%	36%	14%
1999	2,480	1,391	3,453	1,186	491	9,001	28%	15%	38%	13%
2000	2,330	1,335	3,312	1,138	508	8,623	27%	15%	38%	13%
2001	2,308	1,271	3,080	1,033	451	8,143	28%	16%	38%	13%
2002	1,836	1,265	2,991	924	441	7,457	25%	17%	40%	12%
2003	1,634	1,258	2,876	940	419	7,127	23%	18%	40%	13%
2004	1,507	1,091	2,590	788	400	6,376	24%	17%	41%	12%
2005	1,383	1,040	2,488	689	423	6,023	23%	17%	41%	11%
2006	1,232	942	2,256	652	459	5,541	22%	17%	41%	12%
2007	1,185	907	2,100	690	370	5,252	23%	17%	40%	13%
% change 1986 to 2007	-67%	-58%	-45%	-69%	-63%	-59%	-	-	-	-
% change 1994-98 average to 2007	-55%	-34%	-36%	-47%	-46%	-43%	-	-	-	-
% change 2006 to 2007	-4%	-4%	-7%	6%	-19%	-5%	-	-	-	-

Table 2: Pedestrian casualties by year and age (banded) in Greater London 1986 to 2007

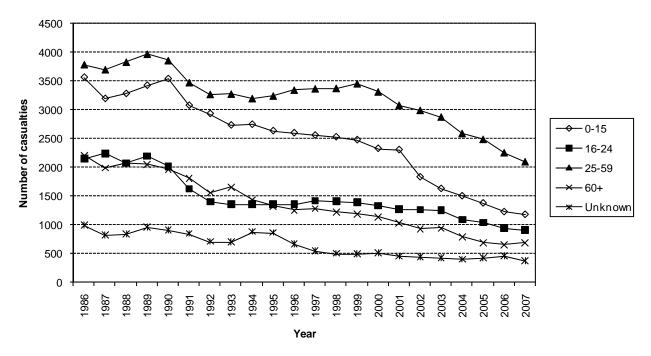


Fig. 3: Pedestrian casualties by year and age (banded) in Greater London 1986 to 2007

# Pedestrian casualties in Greater London 2007

The following section provides a more detailed analysis of pedestrian casualties in Greater London in 2007. This is the most recent year for which finalised data are available.

## How many and who?

During 2007 there were 23,210 personal injury road traffic collisions reported to the police in the Greater London area. Of these collisions, 5,089 (22%) involved injury to one or more pedestrian and resulted in 5,252 pedestrian casualties. Pedestrians represented 19% of total casualties in Greater London in 2007. By comparison, in Great Britain as a whole, pedestrians accounted for 12% of all casualties in 2007.

### Severity and gender

Table 3 shows pedestrian casualties by severity and gender in Greater London in 2007.

	Seve	rity of casualt	у			
	Fatal	Serious	Slight	Total	KSI	Severity ratio
Male	63	702	2,123	2,888	765	26%
Female	46	481	1,837	2,364	527	22%
Total	109	1,183	3,960	5,252	1,292	25%

Table 3: Pedestrian casualties by gender, severity & severity ratio in Greater London 2007

Three quarters (75%) of pedestrian casualties were slightly injured, with 23% suffering serious injury and 2% being killed. Pedestrian KSIs during 2007 accounted for just over one third (34%) of all road user KSIs in Greater London.

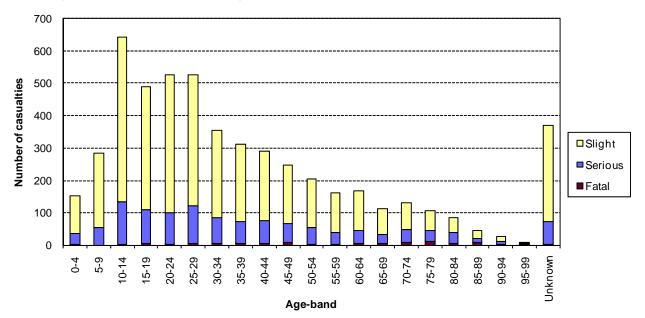
Overall males accounted for 55% of pedestrian casualties and females 45%. For slight casualties the proportion of females rose very slightly (46%), however for KSIs the proportion of male casualties was higher (59%).

# Age and gender

Table 4 and Figure 4 show pedestrian casualties by five-year age bands, gender and severity in Greater London in 2007.

	Casualty	gender	Seve	rity of casual	ty		% of	Severity
Casualty age	Male	Female	Fatal	Serious	Slight	Total	known age	ratio
0-4	90	63	2	34	117	153	3.1%	24%
5-9	178	106	0	54	230	284	5.8%	19%
10-14	358	283	3	133	505	641	13.1%	21%
15-19	253	235	7	102	379	488	10.0%	22%
20-24	258	268	4	97	425	526	10.8%	19%
25-29	276	250	5	117	404	526	10.8%	23%
30-34	215	141	5	82	269	356	7.3%	24%
35-39	173	138	7	67	237	311	6.4%	24%
40-44	175	116	6	69	216	291	6.0%	26%
45-49	137	110	8	60	179	247	5.1%	28%
50-54	111	95	3	53	150	206	4.2%	27%
55-59	85	78	2	38	123	163	3.3%	25%
60-64	90	77	5	42	120	167	3.4%	28%
65-69	61	53	6	28	80	114	2.3%	30%
70-74	73	59	10	40	82	132	2.7%	38%
75-79	62	46	11	35	62	108	2.2%	43%
80-84	48	37	7	34	44	85	1.7%	48%
85-89	24	22	10	12	24	46	0.9%	48%
90-94	13	16	3	10	16	29	0.6%	45%
95-99	5	4	2	5	2	9	0.2%	78%
Total (age known)	2,685	2,197	106	1,112	3,664	4,882	100.0%	25%
Total (age unknown)	203	167	3	71	296	370	-	20%
Total	2,888	2,364	109	1,183	3,960	5,252	-	25%





The highest number of pedestrian casualties occurred in the younger age bands, with a third (34%) of casualties of known age being aged between 10 and 24 years. The 10 to 14 year age band showed the highest number of casualties of any age band (13.1% of known age).

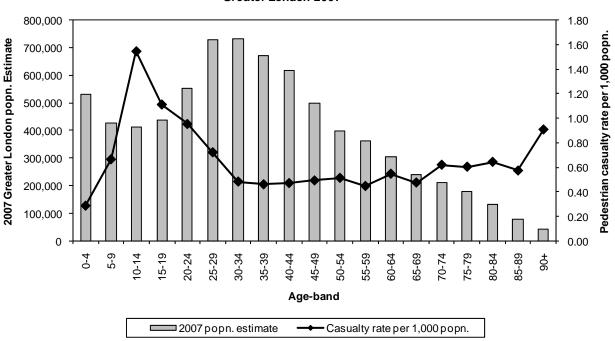
Pedestrian casualties aged 60 years and over represented 14% of all pedestrian casualties of known age, however fatalities in this group represented 51% of all fatal pedestrian casualties of known age.

There were more male pedestrian casualties in all but two of the five-year age bands (20-24 years and 90-94 years).

The highest severity ratios were found in the older age bands, peaking at 78% in the 95-99 years band. The 80-84 and 85-89 year bands both had a severity ratio of 48%. This clearly illustrates the increasing vulnerability of pedestrians to more serious injury with increasing age. However, it should be noted that these three groups did only represent 0.2%, 1.7% and 0.9% of pedestrian casualties of known age respectively. 10-14 year olds, which represented the age band with the highest number of casualties, had a severity ratio of 21%.

### Age and population

Figure 5 shows pedestrian casualties by five-year age band per 1,000 population against the estimated Greater London population, based on the 2007 mid year population estimates. This clearly illustrates the disproportionate number of pedestrian casualties in the 10-19 and 70 years plus age bands compared with the population figures for these groups.



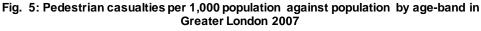
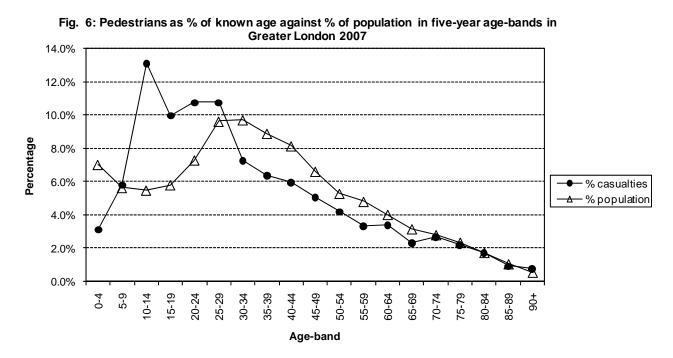


Figure 6 shows the percentage of pedestrian casualties of known age against the percentage of Greater London population in five-year age bands. This again emphasises the disproportionate number of young pedestrian casualties, particularly those aged between 10 and 14 years, but also for those between 15 and 24 years.



#### Child pedestrian casualties

Table 5 looks more closely at child pedestrian casualties (aged 0-15 years), showing them by age and whether they were injured on their journey to or from school. Children represented nearly a quarter (24%) of all pedestrian casualties of known age; of these 30% were injured on the school journey.

The number of child pedestrians injured going to or from school increased noticeably from 11 years, with 50% of 11 and 12 year olds injured on the school journey. This increase coincides with the age at which most children move from primary to secondary school and may therefore be travelling greater distances independently.

	Casualty journ	ney purpose		% to/from
Casualty Age	Other	To/from school	Total	school
0	4	0	4	0%
1	12	0	12	0%
2	24	0	24	0%
3	40	2	42	5%
4	66	5	71	7%
5	37	12	49	24%
6	38	10	48	21%
7	37	12	49	24%
8	45	17	62	27%
9	61	15	76	20%
10	68	28	96	29%
11	67	68	135	50%
12	84	85	169	50%
13	94	46	140	33%
14	68	33	101	33%
15	82	25	107	23%
Total	827	358	1,185	30%

# Where?

Table 6 shows the number of pedestrian casualties by borough, severity and percentage change in KSI casualties in 2007 over the 1994-98 average.

Pedestrian casualties were split almost equally between inner and outer London (49% inner, 51% outer). Overall KSIs were split in the same proportions; however there were more fatalities in outer London (63% compared with 37%). The average severity ratio was slightly higher in outer London (25% compared to 24%)

Regarding progress towards the 2010 casualty reduction target, KSI casualties in inner London showed a reduction of 42% between 2007 and the 1994-98 average, while in outer London there was a reduction of 37%.

	Seve	rity of casual	ty		Severity	1994-98 KSI	2007 KSI	% change 1994-98
Borough	Fatal	Serious	Slight	Total	ratio	average	total	average to 2007
City of London	0	17	102	119	14%	24.6	17	-31%
Westminster	3	99	374	476	21%	178.8	102	-43%
Camden	4	45	185	234	21%	104.0	49	-53%
Islington	4	39	118	161	27%	76.0	43	-43%
Hackney	0	45	146	191	24%	78.4	45	-43%
Tower Hamlets	1	36	118	155	24%	72.6	37	-49%
Greenwich	1	37	101	139	27%	60.2	38	-37%
Lewisham	6	44	105	155	32%	81.6	50	-39%
Southwark	2	53	165	220	25%	79.8	55	-31%
Lambeth	9	56	152	217	30%	123.8	65	-47%
Wandsworth	1	53	136	190	28%	78.2	54	-31%
Hammersmith & Fulham	5	29	124	158	22%	59.6	34	-43%
Kensington & Chelsea	4	42	138	184	25%	71.8	46	-36%
Total inner London	40	595	1,964	2,599	24%	1,089.4	635	-42%
% of Greater London	37%	50%	50%	49%	-	-	49%	-
Waltham Forest	0	31	111	142	22%	60.4	31	-49%
Redbridge	3	27	85	115	26%	48.2	30	-38%
Havering	3	31	77	111	31%	38.2	34	-11%
Barking & Dagenham	3	17	67	87	23%	35.2	20	-43%
Newham	4	41	171	216	21%	68.4	45	-34%
Bexley	3	32	66	101	35%	34.8	35	1%
Bromley	4	30	94	128	27%	48.8	34	-30%
Croydon	2	49	158	209	24%	67.6	51	-25%
Sutton	1	24	58	83	30%	30.0	25	-17%
Merton	4	17	80	101	21%	37.4	21	-44%
Kingston	4	12	47	63	25%	31.6	16	-49%
Richmond	1	23	64	88	27%	32.2	24	-25%
Hounslow	6	27	73	106	31%	50.2	33	-34%
Hillingdon	1	21	104	126	17%	54.0	22	-59%
Ealing	7	46	136	189	28%	91.2	53	-42%
Brent	5	35	126	166	24%	84.6	40	-53%
Harrow	1	25	70	96	27%	34.4	26	-24%
Barnet	8	42	182	232	22%	70.4	50	-29%
Haringey	3	30	123	156	21%	65.2	33	-49%
Enfield	6	28	104	138	25%	64.4	34	-47%
Total outer London	69	588	1,996	2,653	25%	1,047.2	657	-37%
% of Greater London	63%	50%	50%	51%	-	-	51%	-
Total Greater London	109	1,183	3,960	5,252	25%	2,136.6	1,292	-40%

Table 6: Pedestrian casualties by borough, severity and KSI percentage change in 2007 over 1994-98 average in Greater London

Table 7 shows pedestrian casualties by borough, age band and school journey (for child casualties).

The majority of under 16s (64%) were injured in outer London. Nearly two thirds (65%) of school pupils injured while walking to or from school were also in outer London.

More older pedestrians (60 years and over) were also injured in outer London (58%), while slightly more pedestrians in the 16-24 and 25-29 year groups were injured in inner London (51% and 60% respectively).

		C	asualty ag	e (banded)			School pupil	% school
Borough	Under 16	16-24	25-59	60 + over	Unknown	Total	to/from school	pupil
City of London	2	21	74	11	11	119	0	0%
Westminster	44	84	265	51	32	476	7	1%
Camden	25	43	121	29	16	234	8	3%
Islington	22	40	64	24	11	161	4	2%
Hackney	33	36	95	14	13	191	9	5%
Tower Hamlets	38	35	60	14	8	155	13	8%
Greenwich	52	17	50	16	4	139	20	14%
Lewisham	42	26	67	13	7	155	15	10%
Southwark	47	28	112	21	12	220	18	8%
Lambeth	38	37	102	21	19	217	12	6%
Wandsworth	36	32	84	28	10	190	13	7%
Hammersmith & Fulham	27	29	63	26	13	158	8	5%
Kensington & Chelsea	18	34	97	19	16	184	8	4%
Total inner London	424	462	1,254	287	172	2,599	135	5%
% of Greater London	36%	51%	60%	42%	46%	49%	35%	-
Waltham Forest	44	28	46	16	8	142	10	7%
Redbridge	32	17	42	20	4	115	12	10%
Havering	29	25	27	22	8	111	4	4%
Barking & Dagenham	35	18	19	9	6	87	9	10%
Newham	60	47	74	23	12	216	15	7%
Bexley	32	26	21	16	6	101	13	13%
Bromley	46	15	34	23	10	128	27	21%
Croydon	59	35	72	30	13	209	22	11%
Sutton	27	6	25	14	11	83	10	12%
Merton	22	21	38	17	3	101	7	7%
Kingston	20	12	17	12	2	63	4	6%
Richmond	27	11	36	12	2	88	9	10%
Hounslow	28	19	31	19	9	106	8	8%
Hillingdon	42	26	25	16	17	126	17	13%
Ealing	49	26	66	32	16	189	19	10%
Brent	39	24	73	23	7	166	11	7%
Harrow	31	14	26	17	8	96	10	10%
Barnet	59	41	72	39	21	232	18	8%
Haringey	36	19	58	23	20	156	13	8%
Enfield	44	15	44	20	15	138	13	9%
Total outer London	761	445	846	403	198	2,653	251	9%
% Greater London	64%	49%	40%	58%	54%	51%	65%	-
Total Greater London	1,185	907	2,100	690	370	5,252	386	7%

Table 7: Pedestrian casualties by borough, age band and school journey in Greater London 2007

Table 8 shows pedestrian casualties by borough and highway authority.

	Higl	nway authority			
		Highways	Borough		
Borough	TLRN	Agency	road	Total	
City of London	44	0	75	119	
Westminster	87	0	389	476	
Camden	51	0	183	234	
Islington	84	0	77	161	
Hackney	93	0	98	191	
Tower Hamlets	72	0	83	155	
Greenwich	20	0	119	139	
Lewisham	63	0	92	155	
Southwark	86	0	134	220	
Lambeth	115	0	102	217	
Wandsworth	86	0	104	190	
Hammersmith & Fulham	4	0	154	158	
Kensington & Chelsea	48	0	136	184	
Total inner London	853	0	1,746	2,599	
% of inner London	33%	0%	67%	100%	
% of Greater London	77%	0%	42%	49%	
Waltham Forest	1	0	141	142	
Redbridge	9	0	106	115	
Havering	5	0	106	111	
Barking & Dagenham	4	0	83	87	
Newham	6	0	210	216	
Bexley	1	0	100	101	
Bromley	19	0	109	128	
Croydon	36	0	173	209	
Sutton	17	0	66	83	
Merton	15	0	86	101	
Kingston	4	0	59	63	
Richmond	15	0	73	88	
Hounslow	28	0	78	106	
Hillingdon	3	0	123	126	
Ealing	14	0	175	189	
Brent	1	0	165	166	
Harrow	0	0	96	96	
Barnet	19	1	212	232	
Haringey	36	0	120	156	
Enfield	23	0	115	138	
Total outer London	256	1	2,396	2,653	
% of outer London	10%	0%	90%	100%	
% of Greater London	23%	100%	58%	51%	
Total Greater London	1,109	1	4,142	5,252	
% of total	21%	0%	79%	100%	

 Table 8: Pedestrian casualties by borough and highway authority in Greater London 2007

79% of pedestrians were injured on borough roads and 21% on the Transport for London Road Network (TLRN). In inner London two thirds (67%) of pedestrian casualties were injured on borough roads (33% on the TLRN), while in outer London 90% were injured on borough roads and just 10% on the TLRN.

Overall 71% of pedestrian fatalities, 75% of serious injuries and 80% of slight injuries occurred on borough roads, with 29% of fatalities, 25% of serious injuries and 20% of slight injuries on the TLRN.

Table 9 shows pedestrian casualties by road class and severity. 59% were injured on 'A' class roads, 32% on 'C' class or unclassified roads and 9% on 'B' class roads.

	Seve	rity of casual	ty			
First road class	Fatal	Serious	Slight	Total	% of total	Severity ratio
Motorway	0	0	1	1	0%	0%
A	78	758	2,270	3,106	59%	27%
В	8	102	362	472	9%	23%
С	11	154	558	723	14%	23%
Unclassified	12	169	769	950	18%	19%
Total	109	1,183	3,960	5,252	100%	25%

Table 9: Pedestrian casualties by road class, severity and severity ratio in Greater London 2007

The vast majority (98%) of pedestrian casualties were injured on roads subject to a 30mph speed limit. A 24% severity ratio was recorded against these casualties.

Table 10 shows pedestrian casualties by junction detail and junction control. 65% were injured at or within 20m of a junction. Of these, 63% were at a 'T' or staggered junction and 21% at a crossroads. In terms of junction control, 68% of pedestrian casualties injured at a junction were where the control was 'Give Way' and 31% were at a junction controlled by automatic traffic signals.

Table 10: Pedestrian casualties by junction control and junction detail in Greater London 2007

			Junction control			
		Authorised	Automatic		Give Way or	
Junction detail	Not applicable	Person	Traffic Signals	Stop Sign	Uncontrolled	Total
Roundabout	0	1	12	0	67	80
Mini-Roundabout	0	0	6	0	19	25
T & Staggered Junction	0	4	396	9	1,722	2,131
Slip Road	0	0	4	0	26	30
Crossroads	0	1	491	1	233	726
Multi Junction	0	0	93	0	34	127
Private Drive	0	0	0	0	64	64
Other Junction	0	4	51	5	155	215
Total at junctions	0	10	1,053	15	2,320	3,398
No junction within 20m	1,854	0	0	0	0	1,854
Total	1,854	10	1,053	15	2,320	5,252

# Road surface and weather

The majority of pedestrian casualties (82.9%) were injured in collisions that occurred on a dry road surface, with 16.6% on a wet surface and less than 1% in snow or ice.

86% of pedestrian casualties were injured in fine weather conditions, while 10% were injured in the rain.

# When?

Figures 7, 8 and 9 show the number of pedestrian casualties by time of day, day of week and month in Greater London in 2007. These also indicate the proportions injured during the hours of daylight and darkness.

## Time of day

Three quarters (75%) of pedestrian casualties were injured in the 12 hour period between 7am and 7pm, with just over one third (34%) occurring in the four hours between 3pm and 7pm. There was another smaller peak in the morning between 8am and 10am with 11% of casualties. The greatest number of casualties in a single hour (485 casualties or 9%) was recorded between 3pm and 4pm.

The 'low' period for pedestrian casualties was between 1am and 7am, during which time only 5% of the total pedestrian casualties were injured.

72% of pedestrian injuries occurred during daylight hours compared to 28% in the dark.

### Day of week

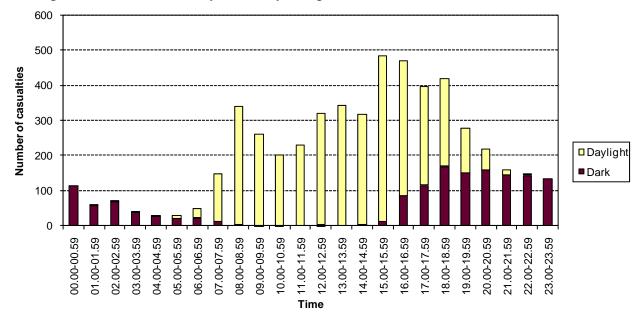
78% of pedestrian casualties were injured on a weekday, with a peak of 17% on a Friday. 12% were injured on a Saturday and 10% on a Sunday.

The highest proportion of pedestrians injured in the dark occurred at the weekend with 38% on a Saturday and 40% on a Sunday.

### Month

Pedestrian casualties were quite evenly spread throughout the year, with no one month having substantially more than any other. The fourth quarter of the year (October to December) had marginally more pedestrian casualties (26%) than each of the other three, and the highest number in a single month (503, 10%) was recorded in November.

At least 40% of pedestrian casualties injured in January (45%), February (40%), November (41%) and December (46%) were injured in the dark.



#### Fig. 7: Pedestrian casualties by time of day and light conditions in Greater London 2007

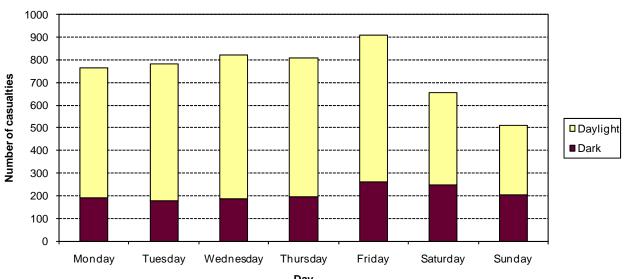


Fig. 8: Pedestrian casualties by day of week and light conditions in Greater London 2007

Day

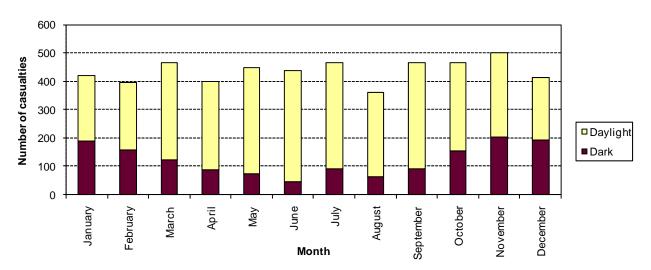


Fig. 9: Pedestrian casualties by month and light conditions in Greater London 2007

14 London Road Safety Unit

# **Pedestrian location and movement**

Tables 11, 12 and 13 show pedestrian casualties by location, crossing facility and movement in Greater London in 2007.

Over one third (35%) of pedestrian casualties of known location were injured at or within 50m of a formal, controlled crossing facility. 18% were injured at an automatic traffic signal junction with a pedestrian phase, 10% at a pelican or similar light controlled crossing and 9% at a zebra crossing. Just over half (53%) of pedestrian fatalities occurred more than 50m from a crossing facility.

	Sev	verity of casu	alty		Severity	
Pedestrian location	Fatal	Serious	Slight	Total	location	ratio
Crossing Road on Ped Crossing	22	224	655	901	20%	27%
Crossing Road in Zig-Zag Approach	1	8	19	28	1%	32%
Crossing Road In Zig-Zag Exit	0	7	5	12	0%	58%
Crossing Road Within 50m of Crossing	15	158	443	616	14%	28%
Crossing Road (Not On Crossing)	45	503	1,701	2,249	50%	24%
On Footpath - Verge	9	68	230	307	7%	25%
On Refuge	1	9	11	21	0%	48%
In Centre Of Carriageway	3	17	45	65	1%	31%
In Road - Not Crossing	5	63	241	309	7%	22%
Total known location	101	1,057	3,350	4,508	100%	26%
Unknown	8	126	610	744	-	18%
Total	109	1,183	3,960	5,252	-	25%

Table 11: Pedestrian casualties by pedestrian location and severity in Greater London 2007

Table 12: Pedestrian casualties by pedestrian crossing facility and severity in Greater London 2007

Severity of casualty							
Pedestrian Crossing Facility	Fatal	Serious	Slight	Total	% of total	ratio	
No crossing facility within 50m	58	668	2,511	3,237	62%	22%	
Zebra	11	110	347	468	9%	26%	
Pelican or similar	8	154	347	509	10%	32%	
Pedestrian phase at ATS	27	223	704	954	18%	26%	
Footbridge or Subway	0	4	1	5	0%	80%	
Central Refuge	5	24	50	79	2%	37%	
Total	109	1,183	3,960	5,252	100%	25%	

Where pedestrian movement was known, 61% of pedestrian casualties (59% of KSIs) were moving from the driver's nearside and 33% (37% of KSIs) from the driver's offside. 15% of pedestrian casualties were masked from the driver's view by parked/stationary vehicles or other objects.

	Sev	verity of casu	alty	% of known			
Pedestrian movement	Fatal	Serious	Slight	Total	movement	Severity ratio	
From Drivers Nearside	36	466	1,565	2,067	51%	24%	
From Drivers Nearside Masked	6	88	313	407	10%	23%	
From Drivers Offside	32	283	840	1,155	29%	27%	
From Drivers Offside Masked	3	52	128	183	5%	30%	
In Road Not Crossing	2	29	118	149	4%	21%	
In Road Not Crossing Masked	0	3	21	24	1%	13%	
In Road Facing Traffic	1	5	9	15	0%	40%	
In Road Back To Traffic	0	5	31	36	1%	14%	
Total known movement	80	931	3,025	4,036	100%	25%	
Unknown	29	252	935	1,216	-	23%	
Total	109	1,183	3,960	5,252	-	25%	

### **Vehicles involved**

Table 14 shows pedestrian casualties by vehicle they were in direct conflict with. Two thirds (67%) of pedestrians were injured by a car. Cars accounted for 45% of fatalities, 63% of serious and 69% of slight injuries.

Collisions with powered two wheelers resulted in 10% of all pedestrian casualties (10% of KSIs). 8% of pedestrians were injured by a bus or coach, however this class of vehicle accounted for 16% of pedestrian fatalities. Collisions with goods vehicles of all sizes resulted in 7% of pedestrian casualties (21% of fatalities and 9% of KSIs). Heavy goods vehicles (7.5 tonnes MGW or above) accounted for 10% of pedestrian fatalities.

Severity of casualty							
Type Of Vehicle	Fatal	Serious	Slight	Total	% of total	ratio	
Pedal Cycle	3	17	51	71	1%	28%	
M/C <= 50cc	0	7	58	65	1%	11%	
M/C 50-125cc	3	44	133	180	3%	26%	
M/C 125-500cc	4	19	55	78	1%	29%	
M/C > 500cc	5	49	139	193	4%	28%	
Private Hire - Licensed	0	8	12	20	0%	40%	
Private Hire - Unlicensed	0	2	1	3	0%	67%	
Тахі	1	42	118	161	3%	27%	
Car	49	748	2,746	3,543	67%	22%	
Minibus (8-16 Pass)	1	8	12	21	0%	43%	
Bus or Coach	17	115	305	437	8%	30%	
Other Motor Vehicle	2	33	51	86	2%	41%	
Other Non Motor Vehicle	0	1	1	2	0%	50%	
Agricultural Vehicle	1	0	0	1	0%	100%	
Tram or Light Rail	0	0	2	2	0%	0%	
Light Goods (=< 3.5T MGW)	10	59	229	298	6%	23%	
Medium Goods (3.5 to 7.5T MGW)	2	8	18	28	1%	36%	
Heavy Goods (=> 7.5T MGW)	11	23	29	63	1%	54%	
Total	109	1,183	3,960	5,252	100%	25%	

Table 14: Pedestrian casualties by vehicle involved, severity and severity ratio in Greater London 2007

#### Vehicle manoeuvre

Table 15 shows pedestrian casualties by vehicle manoeuvre. The majority of pedestrian casualties (65%) were in conflict with a vehicle that was coded as 'going ahead', i.e. not undertaking any particular manoeuvre or turn. 6% were injured by a vehicle turning right and 4% by a vehicle turning left. 61% of pedestrian fatalities involved a vehicle 'going ahead' and a further 9% were killed as a vehicle moved off.

Severity of casualty								
Vehicle manoeuvre	Fatal	Serious	Slight	Total	% of total	Severity ratio		
Reversing	4	41	245	290	6%	16%		
Parked	1	9	36	46	1%	22%		
Going Ahead Held Up	2	16	94	112	2%	16%		
Slowing Or Stopping	3	31	159	193	4%	18%		
Moving Off	10	62	215	287	5%	25%		
U-Turning	0	4	16	20	0%	20%		
Turning Left	3	46	165	214	4%	23%		
Waiting To Turn Left	0	1	2	3	0%	33%		
Turning Right	7	75	241	323	6%	25%		
Waiting To Turn Right	0	0	7	7	0%	0%		
Change Lane To Left	0	3	9	12	0%	25%		
Change Lane To Right	0	1	3	4	0%	25%		
Overtake Move Veh O/S	1	9	12	22	0%	45%		
Overtake Stat Veh O/S	5	51	190	246	5%	23%		
Overtaking Nearside	3	14	27	44	1%	39%		
Going Ahead Left Bend	2	15	47	64	1%	27%		
Going Ahead Right Bend	1	20	41	62	1%	34%		
Going Ahead Other	67	785	2,451	3,303	63%	26%		
Total	109	1,183	3,960	5,252	100%	25%		

Table 15: Pedestrian casualties by vehicle manoeuvre, severity and severity ratio in Greater London 2007

# What is the cost?

Based on the average cost of pedestrian casualties as detailed in Department for Transport draft Transport Analysis Guidance document (TAG Unit 3.4.1), the cost to the community of pedestrian casualties is estimated at around £445 million at June 2007 prices. Pedestrian casualties averaged 14 per day in Greater London in 2007, with a subsequent cost to the community of just under £1.2 million per day.

# **Background documents**

- 1. Road Casualties Great Britain: 2007 Annual Report (Department for Transport) http://www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/casualtiesgbar/roadcasualtiesgreatbritain2007
- 2. Transport Analysis Guidance (TAG) Unit 3.4.1 The Accidents Sub-Objective (Department for Transport - Dec 2008) http://www.dft.gov.uk/webtag/webdocuments/3\_Expert/4\_Safety\_Objective/3.4.1-draft.htm
- Population data Office of National Statistics (ONS) Estimated resident population mid-2007 by single year of age and sex (as at 1 April 2007)

Copies of reports and research published by LRSU can be found at – <u>www.tfl.gov.uk/roadsafetyreports</u>

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