#### Transport for London

## Street Management



## **Fact Sheet**

# London Road Safety Unit LAAU topic 2004-1

February 2004

## Goods vehicle accidents and casualties in Greater London

This fact sheet shows the scale and nature of road traffic accidents resulting in injury to goods vehicle occupants (drivers and passengers) in the Greater London area in 2002 (the latest data available). Information is also provided on the longer-term trends between 1981 and 2002.

It provides background information to support the Government and Mayor of London's target for 2010, to reduce the number killed or seriously injured (KSI) by 40% from the average number of casualties for 1994-98. The latest year is also compared to the base line figure of the previous Government target, which was to reduce casualties by one third by 2000 from the 1981-85 average.

The data provided is for personal injury road traffic accidents occurring on the public highway and reported to the Police in accordance with the *Stats 19* national reporting system. Prior to 1999, *Stats 19* categorised goods vehicles as either 3.5 tonnes maximum gross weight (MGW) and under, or over 3.5 tonnes MGW. Since 1999, goods vehicles have been put into one of three categories: 3.5 tonnes MGW and under, over

3.5 tonnes MGW and under 7.5 tonnes MGW, and 7.5 tonnes MGW and over.

The goods vehicle category includes vehicles from light vans and pick-up trucks, to tankers, tractor units, trailers and articulated vehicles.

# London's goods vehicle casualty rate

In Greater London in 2002 there were 33,895 road traffic accidents, resulting in 41,379 casualties. Of these accidents, 802 involved injury to goods vehicle occupants, and resulted in 952 casualties (2%) - a rate of 13 per 100,000 Greater London population in 2002. This is slightly less than the national rate of 17 per 100,000 population from 10,185 goods vehicle occupant casualties (3% of all casualties in Great Britain for 2002).

Of the 952 goods vehicle occupant casualties in Greater London in 2002, 716 were drivers and 236 were passengers.

Table 1 shows goods vehicle occupant casualties by vehicle type, casualty class, severity and severity ratio (the percentage of fatal and serious injuries to all injuries) in Greater London in 2002.

Table 1: Goods vehicle occupant casualties by vehicle type, casualty class and severity in Greater London 2002

		Severity of casualty								
Goods vehicle type	Casualty class	Fatal	Serious	Slight	Total	Severity ratio				
Goods =< 3.5T MGW	Driver	2	56	539	597	10%				
	Passenger	0	22	178	200	11%				
	Total	2	78	717	797	10%				
Goods 3.5 to 7.5T MGW	Driver	0	7	29	36	19%				
	Passenger	0	1	10	11	9%				
	Total	0	8	39	47	17%				
Goods => 7.5T MGW	Driver	1	15	67	83	19%				
	Passenger	0	3	22	25	12%				
	Total	1	18	89	108	18%				
All goods vehicles	Driver	3	78	635	716	11%				
	Passenger	0	26	210	236	11%				
	Total	3	104	845	952	11%				

### Annual trends 1981 to 2002

The following section shows changes in the number of goods vehicle occupant casualties in Greater London from 1981 to 2002. It should be noted that the City of London has been excluded from this long-term trend analysis as its accident data are only available from 1986

onwards. They have been included in the 2002 section.

Figure 1 and Table 2 show the number of goods vehicle occupant casualties by year, casualty class and severity from 1981 to 2002 for Greater London, excluding the City of London.

Fig 1: Goods vehicle occupant casualties by year, severity and casualty class in Greater London (excl. City) 1981-2002

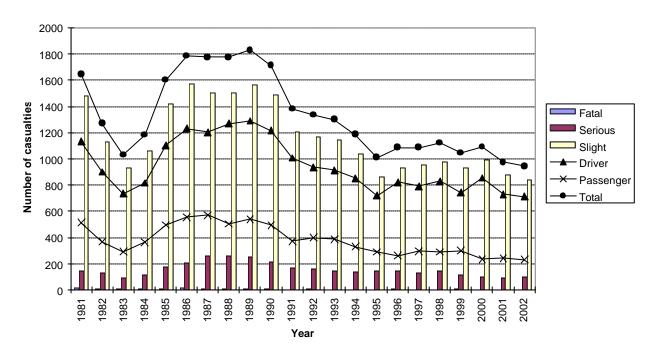


Table 2: Goods vehicle occupant casualties by year and severity in Greater London (excl. The City) 1981-2002

			Sev	erity of casu	ualty		
Year of accident	Driver	Passenger	Fatal	Serious	Slight	Total	Severity ratio
1981	1,133	513	14	148	1,484	1,646	10%
1982	901	369	6	134	1,130	1,270	11%
1983	736	294	8	90	932	1,030	10%
1984	817	366	6	116	1,061	1,183	10%
1985	1,105	497	9	175	1,418	1,602	11%
1981 to 1985 average	938.4	407.8	8.6	132.6	1,205.0	1,346.2	10%
1986	1,231	556	14	205	1,568	1,787	12%
1987	1,204	571	11	264	1,500	1,775	15%
1988	1,270	504	11	263	1,500	1,774	15%
1989	1,289	539	10	256	1,562	1,828	15%
1990	1,217	495	8	213	1,491	1,712	13%
1991	1,008	373	5	168	1,208	1,381	13%
1992	936	400	9	158	1,169	1,336	13%
1993	914	386	2	149	1,149	1,300	12%
1994	853	332	3	140	1,042	1,185	12%
1995	721	290	4	146	861	1,011	15%
1996	822	264	6	146	934	1,086	14%
1997	791	296	5	130	952	1,087	12%
1998	831	292	3	144	976	1,123	13%
1994 to 1998 average	803.6	294.8	4.2	141.2	953.0	1,098.4	13%
1999	744	302	6	112	928	1,046	11%
2000	855	236	4	98	989	1,091	9%
2001	732	244	4	90	882	976	10%
2002	712	233	3	104	838	945	11%
% change 1981-85 average to 2002	-24%	-43%	-65%	-22%	-30%	-30%	
% change 1994-98 average to 2002	-11%	-21%	-29%	-26%	-12%	-14%	

The general trend in goods vehicle occupant casualties has been downward, with the exception of a notable increase during the late 1980s. There were overall decreases of 30% between the 1981-85 average and 2002, and 14% between the 1994-98 average and 2002. Goods vehicle occupant casualties decreased by 3% between 2001 and 2002.

Regarding progress towards the 2010 target to reduce KSI casualties by 40%, 2002 figures, when compared with the 1994-98 average, reveal that KSI goods

vehicle occupant casualties have decreased by 26%.

Goods vehicle occupant fatalities have fallen by 79%, from a peak of 14 in 1986 to 3 in 2002.

Despite these reductions, the severity ratio has shown little change over time. It has in fact increased over the last three years from 9% to 11%, although during the late 1980s and in 1995 it reached 15%.

# Changes to goods vehicle movement in Greater London

The change in the number of goods vehicle occupant casualties needs to be viewed against goods vehicle use on the road. Ideally casualties need to be assessed as a rate per unit of travel, such as kilometres driven. For London this requires reliable estimates of goods vehicle kilometres driven at a Borough level, measured annually. Such detailed data is not available, but there are regular surveys of radial traffic movements in London, which do give useful indicators of the change in travel over time. These survevs measure 24-hour radial vehicle flows crossing the Greater London boundary, Inner and Central London cordons. Each cordon is measured every two to three years.

Goods vehicle 24-hour, two-way flows across the Greater London boundary cordon were 330,000 vehicles per day in 1980 compared with 440,000 in 2001, an increase of one third (33%).

Across the inner London cordon, goods vehicles per day increased by 7%, from 344,000 in 1981 to 368,000 in 2002.

Goods vehicle flows across the central London cordon decreased by 10%, from 271,000 per day in 1981 to 245,000 per day in 2002.

Figure 2 shows the radial cordon goods vehicle flows between 1980 and 2002. It shows a general upward trend in goods vehicle movements into Greater London (across the boundary cordon), while goods vehicle flows into the central area have been on a general downward trend since 1989.

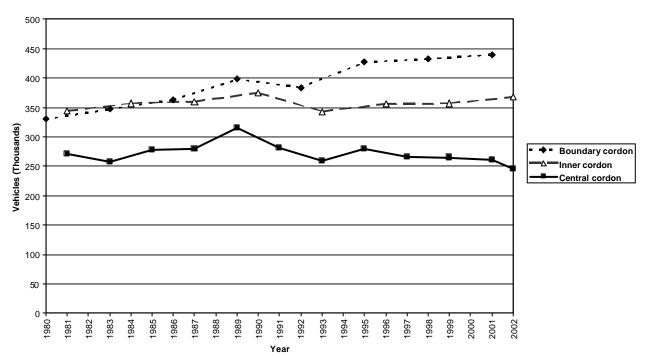


Fig. 2: Radial goods vehicle movements in London, both directions combined, 1980-2002

In terms of vehicle flows, goods vehicles are categorised into three bands according to weight – light, medium and heavy. It should be noted that these categories are not an exact match for the three classifications used in *Stats 19*.

Across the Greater London boundary cordon, light goods vehicles showed a marked increase of 107% between 1980 and 2001, while medium and heavy goods both decreased by 24% in the same period.

Light goods vehicles increased by 52% across the inner London cordon between 1981 and 2002, while medium and heavy goods decreased by 44%.

Across the central London cordon, light goods vehicles increased by 28% between 1981 and 2002, while medium and heavy goods decreased by 47% and 61% respectively.

# Changes in goods vehicle occupant casualties between 1981 and 2002

#### Gender

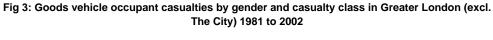
Figure 3 shows goods vehicle occupant casualties by gender and casualty class

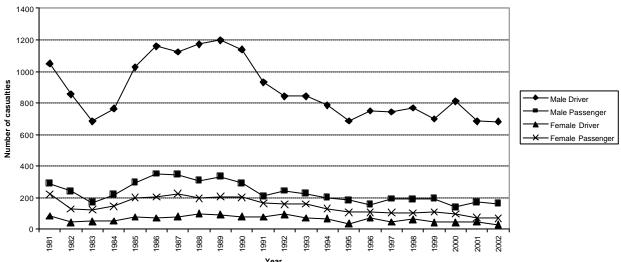
in Greater London (excluding the City of London) from 1981 to 2002.

By far the greatest proportion of goods vehicle occupant casualties are male, with an average of 84% per year over the period 1981 to 2002. Over the last three years the proportion of male casualties has been rising steadily, with 90% of all goods vehicle occupant casualties in 2002 being male.

The numbers of both male and female goods vehicle occupant casualties have been decreasing over time. Male casualties decreased by 24% from the 1981-85 average to 2002, and by 9% from the 1994-98 average to 2002. Females showed decreases of 56% from the 1981-85 average to 2002 and 41% from the 1994-98 average to 2002.

On average, over the period 1981 to 2002, 79% of male goods vehicle occupant casualties were drivers, while 69% of female occupants were passengers.





## **Age Trends**

Table 3: Goods vehicle occupant casualties by age-band and year in Greater London (excl. The City) 1981 to 2002

		Casualty age	banded			
	Under 16	16-24	25-59	60 + over	Unknown	Total
1981	76	439	909	102	120	1,646
1982	51	350	775	55	39	1,270
1983	48	271	632	44	35	1,030
1984	46	388	648	50	51	1,183
1985	64	504	845	79	110	1,602
1981 to 1985 average	57	390.4	761.8	66	71	1,346
1986	71	557	973	62	124	1,787
1987	65	573	976	60	101	1,775
1988	52	566	983	65	108	1,774
1989	72	559	1,006	73	118	1,828
1990	48	460	1,041	78	85	1,712
1991	49	333	872	54	73	1,381
1992	41	332	845	40	78	1,336
1993	53	297	828	53	69	1,300
1994	29	254	765	46	91	1,185
1995	25	204	667	50	65	1,011
1996	21	196	761	41	67	1,086
1997	40	202	763	40	42	1,087
1998	25	170	837	47	44	1,123
1994 to 1998 average	28	205.2	758.6	44.8	61.8	1,098
1999	40	158	753	38	57	1,046
2000	23	151	821	48	48	1,091
2001	17	139	737	43	40	976
2002	23	140	693	43	46	945
% change 1981-85 average to 2002	-60%	-64%	-9%	-35%	-35%	-30%
% change 1994-98 average to 2002	-18%	-32%	-9%	-4%	-26%	-14%

Fig 4: Goods vehicle occupant casualties by age band in Greater London 1981 to 2002

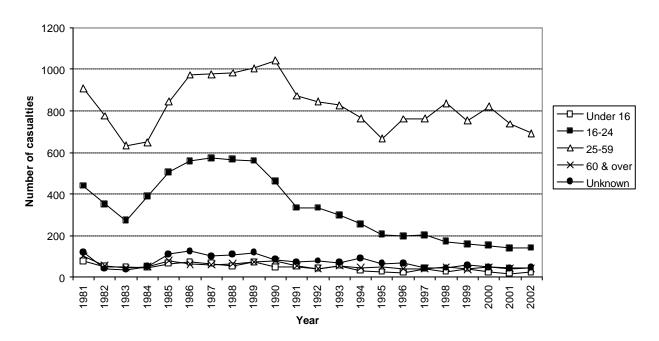


Table 3 and Figure 4 show goods vehicle occupant casualties by age-band in Greater London from 1981 to 2002.

While casualties in all age groups show a downward trend, the number of goods vehicle occupant casualties in age-band 16-24 years shows the largest decrease over time. This group showed a decrease of 64% from the 1981-85 average to 2002, and a decrease of 32% from the 1994-98 average to 2002. The reduction in the age-band 25-59 years between the two average figures and 2002 has remained constant at 9%.

# Goods vehicle occupant casualties in Greater London, 2002

The following section provides a more detailed analysis of goods vehicle occupant casualties in Greater London, including the City of London, during 2002 – the most recent year for which finalised data are available at time of writing.

### How many?

During 2002 there were 33,895 personal injury road traffic accidents reported to the Police in the Greater London area. Of these accidents, 802 (2.4%) involved injury to goods vehicle occupants (driver or passenger) and resulted in 952 casualties.

Males accounted for 90% of these casualties and females for 10%. The corresponding proportions for all road user casualties in 2002 were 62% male and 38% female. 75% of the occupant casualties were drivers, of these 96%

were male. Females accounted for 30% of all goods vehicle occupant casualties.

The majority of goods vehicle occupant casualties were slightly injured (89%), with 11% seriously injured and 0.3% killed. In total, goods vehicle occupant casualties killed or seriously injured accounted for 2% of all road user KSIs in London.

#### What is the cost?

Based on the average cost of goods vehicle occupant casualties from DfT Highways Economics Note No. 1, at June 2002 prices, the cost to the community of this class of casualties is estimated at around £40 million (approximately £42 million at June 2003).

The 952 goods vehicle occupant casualties recorded in 2002 averaged 2.6 per day, with a subsequent daily cost to the community of approximately £109,000.

#### How old?

Table 4 and Figure 5 show the number of goods vehicle occupant casualties by five-year age-bands, gender, severity and severity ratio in Greater London in 2002.

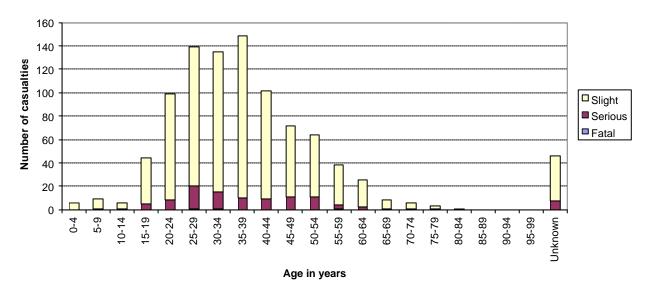
58% of goods vehicle occupant casualties of known age were between the ages of 25 and 44 years, with the highest number occurring in the 35-39 years age-band (16% of known age).

The highest severity ratio (33%) was found in the 75-79 years age group, however there were only three casualties in this group. The next highest severity ratio (17%) was found in three age bands – 10-14, 50-54 and 70-74 years of age. There does not appear to be a link between age and severity ratio for goods vehicle occupants.

Table 4: Goods vehicle occupant casualties by age-band, gender, severity and severity ratio in Greater London 2002

			Sev	erity of casu	alty		Severity	% of
Casualty age	Male	Female	Fatal	Serious	Slight	Total	ratio	known age
0-4	2	4	0	0	6	6	0%	1%
5-9	4	5	0	1	8	9	11%	1%
10-14	3	3	0	1	5	6	17%	1%
15-19	31	13	0	5	39	44	11%	5%
20-24	82	17	0	8	91	99	8%	11%
25-29	129	10	1	19	119	139	14%	15%
30-34	131	4	1	14	120	135	11%	15%
35-39	142	7	0	10	139	149	7%	16%
40-44	94	8	0	9	93	102	9%	11%
45-49	64	8	0	11	61	72	15%	8%
50-54	58	6	0	11	53	64	17%	7%
55-59	35	3	1	3	34	38	11%	4%
60-64	23	2	0	2	23	25	8%	3%
65-69	6	2	0	1	7	8	13%	1%
70-74	6	0	0	1	5	6	17%	1%
75-79	2	1	0	1	2	3	33%	0%
80-84	1	0	0	0	1	1	0%	0%
85-89	0	0	0	0	0	0	-	0%
90-94	0	0	0	0	0	0	-	0%
95-99	0	0	0	0	0	0	-	0%
Total (age known)	813	93	3	97	806	906	11%	100%
Total (age unknown)	40	6	0	7	39	46	15%	-
Total	853	99	3	104	845	952	11%	-

Fig 5: Goods vehicle occupant casualties by age-band and severity in Greater London 2002



#### Where?

Table 5 shows the number of goods vehicle occupant casualties by borough, severity, severity ratio and as a percentage of all casualties in each London borough in 2002.

Approximately two-thirds (68%) of all goods vehicle occupants were injured on roads in outer London. This included all fatalities, 66% of all serious injuries and 68% of all slight injuries. The severity ratio for both inner and outer London was 11%.

Table 5: Goods vehicle occupant casualties by borough and severity in Greater London 2002

							% of all
		Sev	erity of casua	alty	Total	Severity	casualties
Borough	Accidents	Fatal	Serious	Slight	Casualties	Ratio	for Borough
City Of London	5	0	0	7	7	0%	2%
Westminster	47	0	7	57	64	11%	3%
Camden	20	0	4	23	27	15%	2%
Islington	17	0	1	17	18	6%	1%
Hackney	4	0	0	5	5	0%	0%
Tower Hamlets	29	0	4	28	32	13%	3%
Greenwich	28	0	5	27	32	16%	2%
Lewisham	12	0	5	8	13	38%	1%
Southwark	28	0	3	29	32	9%	2%
Lambeth	26	0	2	26	28	7%	1%
Wandsworth	21	0	2	23	25	8%	2%
Hammersmith & Fulham	9	0	1	10	11	9%	1%
Kensington & Chelsea	8	0	1	11	12	8%	1%
Total inner London	254	0	35	271	306	11%	2%
% of Greater London	32%	0%	34%	32%	32%		
Waltham Forest	25	0	5	28	33	15%	3%
Redbridge	24	0	3	27	30	10%	2%
Havering	41	1	8	42	51	18%	4%
Barking & Dagenham	26	1	0	29	30	3%	4%
Newham	26	0	2	27	29	7%	2%
Bexley	38	0	2	42	44	5%	5%
Bromley	46	0	7	46	53	13%	4%
Croydon	19	0	2	18	20	10%	1%
Sutton	20	0	3	25	28	11%	4%
Merton	19	1	4	18	23	22%	3%
Kingston	8	0	2	11	13	15%	2%
Richmond	13	0	1	15	16	6%	2%
Hounslow	18	0	2	17	19	11%	1%
Hillingdon	29	0	4	27	31	13%	2%
Ealing	37	0	5	39	44	11%	2%
Brent	26	0	4	26	30	13%	2%
Harrow	6	0	1	5	6	17%	1%
Barnet	43	0	1	50	51	2%	3%
Haringey	21	0	1	22	23	4%	2%
Enfield	63	0	12	60	72	17%	4%
Total outer London	548	3	69	574	646	11%	3%
% Greater London	68%	100%	66%	68%	68%		
Total Greater London	802	3	104	845	952	11%	2%

#### The Streets

Table 6: Goods vehicle occupant casualties by road class and severity in Greater London 2002

	Seve	rity of casual	ty			
First Road Class	Fatal	Serious	Slight	Total	Severity ratio	% of total
Motorway	0	8	45	53	15%	6%
A	2	66	514	582	12%	61%
В	0	7	48	55	13%	6%
С	0	10	121	131	8%	14%
Unclassified	1	13	117	131	11%	14%
Total	3	104	845	952	11%	100%

Table 6 shows goods vehicle occupant casualties by road class and severity. 61% of goods vehicle occupant casualties occurred on 'A' class roads, with 14% on both 'C' and unclassified roads, and 6% on both motorways and 'B' class roads. The highest severity ratio (15%) was recorded on motorways.

The majority of goods vehicle occupant casualties (56%) were injured on two-lane, single carriageway roads. The highest severity ratio (14%) was recorded on three-lane, dual carriageway roads, but this road type accounted for only 14% of goods vehicle occupant casualties.

78% of goods vehicle occupant casualties were injured on roads with a 30mph speed limit. Generally, severity ratios increased with speed limit, with 11% at 30mph, 13% at 40mph, 17% at 60mph and a peak of 21% on roads with a 70mph speed limit. The only exception was a severity ratio of 8% at 50mph.

66% of goods vehicle occupant casualties were injured at or within 20 metres of a junction. Of these, 29% were injured at 'T' or staggered junctions and 19% at crossroads. Of those injured at a junction, 54% were at a junction with a 'Give Way' control, and 33% were at a junction controlled by automatic traffic signals (ATS).

Table 7 shows goods vehicle occupant casualties by highway authority, severity and severity ratio in Greater London in 2002. The majority of injuries occurred on borough roads. These made up 33% of fatalities, 58% of serious and 65% of slight casualties. Overall however, overall those injured on Highways Agency roads displayed a higher severity ratio, 17% compared with 13% on TLRN and 10% on Borough roads, although their numbers are relatively small.

Table 7: Goods vehicle occupant casualties by highway authority and severity in Greater London 2002

	Seve	rity of casual	ty			
	Fatal	Serious	Slight	Total	Severity ratio	% of total
TLRN	2	35	253	290	13%	30%
Highways Agency Road	0	9	43	52	17%	5%
Borough Road	1	60	549	610	10%	64%
Total	3	104	845	952	11%	100%

#### Weather/road surface

Table 8: Goods vehicle occupant casualties by weather and severity in Greater London 2002

	Sev	erity of casu	alty	Severity			
Weather (Detailed)	Fatal	Serious	Slight	Total	ratio	% of total	
Fine	1	88	687	776	11%	81.5%	
Raining	1	14	134	149	10%	15.7%	
Snowing	0	0	1	1	0%	0.1%	
Fine/High Winds	0	1	1	2	50%	0.2%	
Raining/High Winds	1	1	3	5	40%	0.5%	
Snowing/High Winds	0	0	0	0	-	0.0%	
Fog/Mist	0	0	4	4	0%	0.4%	
Other	0	0	4	4	0%	0.4%	
Weather U/K	0	0	11	11	0%	1.2%	
Total	3	104	845	952	11%	100%	

Table 8 shows goods vehicle occupant casualties by weather and severity in Greater London, during 2002. 82% of all goods vehicle occupant casualties were injured in fine weather conditions, with a resultant severity ratio of 11%. 16% were injured in rain. The highest severity ratio (50%) was recorded for casualties in fine weather with high winds. However, these conditions accounted for less than 0.5% of all casualties.

71% of goods vehicle occupant casualties were injured in a collision on a dry road surface and 28% on a wet surface.

#### When?

Figures 6, 7 and 8 show the number of goods vehicle occupant casualties by time of day, day of week and month respectively in Greater London in 2002. They also indicate the proportions occurring during daylight hours and dark conditions.

#### Time of day

65% of all goods vehicle occupant casualties were injured between 7am and 5pm. Casualties remained at a consistent level during this period. The

highest single hour was 4pm to 5pm, which accounted for 8% of casualties. The low period for goods vehicle occupant casualties was between midnight and 6am, when time only 9% of total casualties occurred. 74% of goods vehicle occupant casualties occurred during daylight hours compared to 26% in hours of darkness.

#### Day of week

84% of goods vehicle occupant casualties were injured between Monday and Friday, with a peak of 19% on Monday. The weekday average was 17%, compared to 10% on Saturdays and 6% on Sundays. The highest proportion of goods vehicle occupant casualties during the hours of darkness (45%) occurred on Sunday.

#### Month

The highest number of goods vehicle occupant casualties were recorded in October (11%) and the lowest number in August (6%). During the winter months of January, November and December, 49%, 47% and 39% of casualties respectively occurred during the hours of darkness, compared with July and August, with 11% and 9% respectively.

Fig 6: Goods vehicle occupant casualties by time of day and light conditions in Greater London 2002

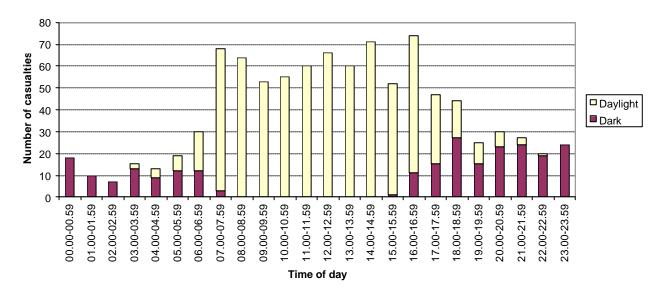


Fig 7: Goods vehicle occupant casualties by day and light conditions in Greater London 2002

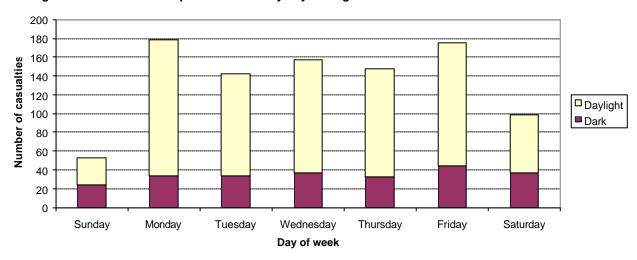


Fig 8: Goods vehicle occupant casualties by month and light conditions in Greater London 2002

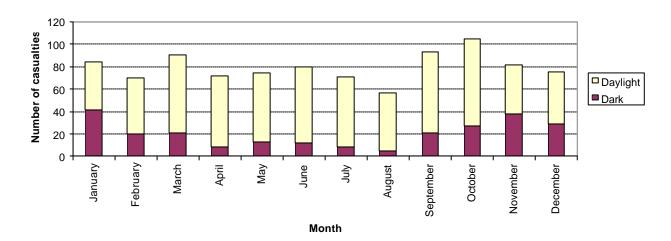


Table 9: Goods vehicle occupant casualties by vehicle type, gender and severity in Greater London 2002

	Casualty	Gender	Casualty Severity		ty			
Goods vehicle type	Male	Female	Fatal	Serious	Slight	Total	Severity ratio	% of Total
Goods =< 3.5T MGW	711	86	2	78	717	797	10%	84%
Goods 3.5 to 7.5T MGW	42	5	0	8	39	47	17%	5%
Goods => 7.5T MGW	100	8	1	18	89	108	18%	11%
All goods vehicles	853	99	3	104	845	952	11%	100%

### Goods vehicle type

Table 9 shows goods vehicle occupant casualties by vehicle type, gender and severity in Greater London in 2002. 84% of casualties were injured in goods vehicles up to 3.5 tonnes MGW, 5% in vehicles between 3.5 to 7.5 tonnes MGW and 11% in vehicles of 7.5 tonnes MGW and above.

Only 2% of all goods vehicle occupant casualties were injured in articulated goods vehicles.

#### Manoeuvre

Table 10 shows goods vehicle occupant casualties by vehicle manoeuvre and severity. 58% of goods vehicle occupant casualties were injured while their vehicle was 'going ahead', with a further 18% in vehicles 'going ahead but held up'. 8% were in vehicles either turning or waiting to turn right and 6% in a vehicle that was stopping.

4% of goods vehicle occupant casualties were in skidding vehicles, and a further 5% were injured in accidents where the goods vehicle overturned.

Table 10: Goods vehicle occupant casualties by vehicle manoeuvre and severity in Greater London 2002

	Sev	erity of casu	alty			
Vehicle manoeuvre	Fatal	Serious	Slight	Total	Severity ratio	% of total
Reversing	0	0	4	4	0%	0%
Parked	0	3	23	26	12%	3%
Going Ahead But Held Up	0	4	166	170	2%	18%
Stopping	0	7	46	53	13%	6%
Starting	0	0	5	5	0%	1%
<u>U-Turn</u>	0	1	8	9	11%	1%
Turning Left	0	1	12	13	8%	1%
Waiting to Turn Left	0	0	1	1	0%	0%
Turning Right	0	9	60	69	13%	7%
Waiting to Turn Right	0	2	8	10	20%	1%
Changing Lane To Left	0	1	14	15	7%	2%
Changing Lane To Right	0	0	6	6	0%	1%
Overtaking Moving Veh O/S	0	0	9	9	0%	1%
Overtaking Stat Veh O/S	0	0	8	8	0%	1%
Overtaking Nearside	0	1	2	3	33%	0%
Going Ahead Left Bend	0	2	11	13	15%	1%
Going Ahead Right Bend	0	6	12	18	33%	2%
Going Ahead Other	3	67	450	520	13%	55%
Total	3	104	845	952	11%	100%

# Contributory factors in goods vehicle occupant accidents

Table 11 shows goods vehicle occupant casualties by the main vehicle contributory factor in Greater London in 2002.

The contributory factor is subjective, but gives an indication of the main causation

factor attributed to the vehicle the casualty was in.

Contributory factor 224 (going too fast having regard to road environment) was the third most common factor attributed to goods vehicles. Two of the three goods vehicle occupant casualties fatalities were in vehicles allocated speed-related contributory factors, the third being in a vehicle which lost control.

Table 11: Vehicle occupant casualties by vehicle contributory factor in Greater London 2002

	Sev	erity of casua	alty		
Vehicle contributory factor	Fatal	Serious	Slight	Total	Severity ratio
601 Going ahead normally	0	25	240	265	9%
600 Parked or stationary	0	8	206	214	4%
224 Going too fast having regard to road environment	1	21	98	120	18%
207 Disobeyed STOP or GIVE WAY sign or marking	0	5	28	33	15%
209 Turning right injudiciously	0	4	27	31	13%
225 Going too fast having regard to other road users	1	3	25	29	14%
000 Factor unknown	0	6	21	27	22%
299 Other driver/rider factor	0	1	25	26	4%
216 Driving too close to vehicle in front	0	3	22	25	12%
238 Swerved/braked to avoid having accident	0	3	20	23	13%
603 Turning normally	0	2	20	22	9%
221 Changing lane injudiciously	0	1	14	15	7%
208 Disobeyed other traffic sign	0	0	14	14	0%
202 Physical/mental defect or illness	0	4	8	12	33%
200 Drink	0	3	7	10	30%
204 Disobeyed ATS	0	3	7	10	30%
231 Driving/riding on wrong side of road	0	3	7	10	30%
239 Lost control - no apparent reason	1	1	8	10	20%

Table 12: All casualties resulting from accidents in which goods vehicles were involved by mode of travel and severity in Greater London 2002

	Sev	erity of casu	alty			
Casualty mode of travel	Fatal	Serious	Slight	Total	Severity ratio	% of total
Pedestrian	18	115	446	579	23%	13%
Pedal cycle	13	48	243	304	20%	7%
Powered two-wheeler	11	102	474	587	19%	13%
Car	11	197	1,817	2,025	10%	44%
Taxi	0	5	35	40	13%	1%
Bus or Coach	0	8	99	107	7%	2%
Goods Vehicles	3	104	845	952	11%	21%
Other	0	3	28	31	10%	1%
Total	56	582	3,987	4,625	14%	100%

# All casualties arising from accidents involving goods vehicles

So far this fact sheet has looked exclusively at goods vehicle occupant casualties, of which there were 952, arising from 802 collisions, in 2002. There were however, a total of 3,741 collisions involving goods vehicles in 2002, which resulted in 4,625 casualties.

Table 12 shows all casualties resulting from accidents in which goods vehicles were involved, in Greater London in 2002. It must be emphasised that not all casualties were injured by goods vehicles, but may have been injured by another vehicle involved in the collision.

The three highest severity ratios were recorded against pedestrians (23%), pedal cyclists (20%) and powered two-wheelers (19%), illustrating the vulnerability of these road users to serious injury when involved in accidents with goods vehicles.

The following section looks at pedestrian casualties injured by goods vehicles in more detail. Due to the nature of the data available, it is not possible to look at pedal cycle and powered two-wheeler casualties in the same way. Each of these vulnerable road user groups is discussed in LAAU topic fact sheets that are regularly updated.

# Pedestrian casualties injured by goods vehicles

The following section looks in more detail at pedestrians injured by goods vehicles in Greater London. For further information on pedestrian casualties see LAAU Topic Fact Sheet 2003-3.

Figure 9 shows pedestrian casualties injured by goods vehicles by severity in Greater London (excluding the City of London) from 1981 to 2002. There has been a general downward trend in such casualties since numbers peaked in 1985. Overall pedestrian casualties decreased by 52% from the 1981-85 average to 2002, and by 22% from the 1994-98 average to 2002.

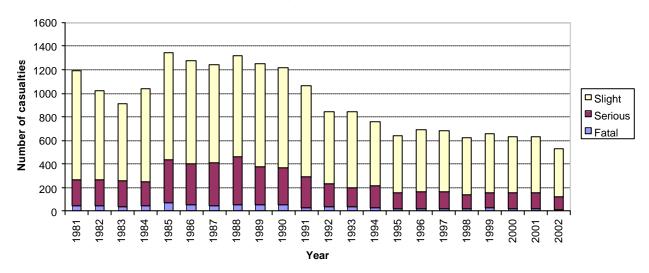
Table 13 shows pedestrian casualties injured by goods vehicles by vehicle type, gender and severity in Greater London (including the City) in 2002.

Of the 579 pedestrian casualties injured in accidents involving goods vehicles, 550 were directly injured by a goods vehicle. 77% were injured by goods vehicles weighing up to 3.5 Tonnes MGW. The severity ratio increased with the weight of goods vehicle, with a 38% severity ratio for pedestrians injured by goods vehicles weighing over 7.5 Tonnes MGW. Overall, the severity ratio for pedestrian casualties was 23%, more than twice the rate for goods vehicle occupants (11%).

Table 13: Pedestrian casualties injured by goods vehicles by vehicle type, gender and severity in Greater London 2002

	Gender of casualty		Severity of casualty			Severity		
Type Of Goods Vehicle	Male	Female	Fatal	Serious	Slight	Total	ratio	% of total
Goods =< 3.5T MGW	235	188	3	74	346	423	18%	77%
Goods 3.5 to 7.5T MGW	14	12	4	5	17	26	35%	5%
Goods => 7.5T MGW	66	35	9	29	63	101	38%	18%
Total	315	235	16	108	426	550	23%	100%

Fig 9: Pedestrians injured by goods vehicles by year and severity in Greater London (excl. The City) 1981 to 2002



## **Reference Documents**

- 1. Road Casualties Great Britain 2002: Annual Report Department for Transport (DfT), (October 2003) (<a href="https://www.dft.gov.uk/stellent/groups/dft">www.dft.gov.uk/stellent/groups/dft</a> transstats/documents/page/dft transstats 024293.hcsp)
- 2. Highways Economics Note No. 1 2002 DfT (November 2003) (www.dft.gov.uk/stellent/groups/dft\_rdsafety/documents/page/dft\_rdsafety\_026183.hcsp)
- 3. Radial Traffic Movements in London 1971 2002 TfL (unpublished)
- 4. Mid-2002 population estimates: United Kingdom Office for National Statistics (www.statistics.gov.uk/census2001/)