
Secretariat memorandum

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Agenda item: 8
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London road and bus safety statistics

1 Purpose of report

- 1.1. To give some background to members about road and bus safety statistics that are published. To propose what may be reported to the Board as part of the TfL Performance Report. To propose further area of research looking at on-bus casualties.

2 Background

- 2.1. Members have asked that the quarterly TfL Performance Report includes bus road safety.
- 2.2. Road safety statistics are collected by the Department for Transport. They are based on the reports of the police officers that attend the scene of a collision. The system of police reporting is widely known as 'Stats 19'. The statistics are reported annually, but there is a long time lag between collection of the data and publication. Publication is typically in June of the following calendar year. The 'Stats 19' data is the only authoritative statistics on road safety casualties.
- 2.3. 'Stats 19' data is now presented by various websites and so are easily viewable by the public. An example is appended taken from the Crashmap site: <http://www.crashmap.co.uk/>. TfL has its own version <http://www.collisionmap.london/>
- 2.4. Additionally, TfL publish data their contracted bus operators collect where one of their buses is involved in a collision or there is an injury/incident. There are also occasional academic studies of road casualties. For example, TfL has previously commissioned Loughborough University to analyse 5 years of cycle fatality files.
- 2.5. All local highway authorities have a legal duty to investigate highways collisions and to design a programme to prevent casualties on their roads. They do this in a variety of ways under the banner of Education, Enforcement and Engineering. The Traffic Commissioner for the South East is responsible for licensing and regulation of bus operators and drivers.

- 2.6. Bus operators (along with their drivers) are primarily responsible for driving standards. TfL take a variety of measures to maintain and improve bus operation safety. There are approximately 7,500 covert assessments of drivers per year carried out by AA DriveTech. There are a further 22,000 mystery traveller surveys undertaken for TfL annually, which include a 'safety and comfort' assessment. The bus companies have their own approaches. For example, Go-Ahead London uses instructors and mentors to monitor their drivers if they have concerns. Go-Ahead have signed up to the Institute of Advanced Motorists programme, ensuring that drivers have further advanced driver training. TfL also have training plans to improve safety across London's bus operators.
- 2.7. TfL has recently announced measures to reduce road casualties including, for example, incentives for the bus companies, an innovative training video and a scheme whereby drivers can report safety issues to a third party.

3 Recommendation

- 3.1. Members agree on the statistics they wish to see reported as part of the TfL Performance Report.
- 3.2. It is proposed that the annual road safety statistics are reported to members along with the provisional quarterly statistics as they become available. Quarter 2, 2015 is appended at the end of this report and includes a comparison with the same quarter in 2014. There are typically seasonal variations as well as variation from year to year. It is not advisable to compare one year to another, but to look at trends.
- 3.3. It is proposed that a summary of the quarterly statistics collected by the bus operators and published by TfL is reported to members where the injury results in a fatality or hospital treatment.
- 3.4. It is recommended that London TravelWatch should seek external funding to investigate on-bus passenger injury. An investigation of this nature would not be possible without external funding.

4 Published road safety statistics

- 4.1. 'Stats 19' collision and casualty statistics are presented in many different ways:
- by transport mode;
 - severity of injury;
 - time of day;
 - the borough where the collision occurred;
 - road type;
 - weather etc.
- 4.2. Looking London-wide, the most useful statistics are casualties by transport mode and severity of the injury. For example, the 2014 table for road casualties, within the Metropolitan Police Force area is shown below. The

severities are i) killed, ii) severely injured (probably involving hospitalisation) and iii) slight injuries treated at the scene. Often a comparison with the previous year and an average over a number of years is tabulated. Other analysis is possible.

Table 1: Monitoring casualties in London - all roads.

Casualties in the year 2014 compared with the 2005-09 average and 2014

Casualty severity	User group	Casualty numbers			Percentage change in 2014 over	
		2005-2009 average	2013	2014	2013	2005-2009 average
Fatal	Pedestrians	96	65	64	-2%	-33% *
	Pedal cyclists	17	14	13	-7%	-22%
	Powered two-wheeler	43	22	27	23%	-38% *
	Car occupants	49	25	19	-24%	-62% *
	Bus or coach occupants	2	1	0	-100%	-100%
	Other vehicle occupants	3	5	4	-20%	25%
	Total	211	132	127	-4%	-40% *
	Children (under 16 years)	12	6	3	-50%	-74% *
Serious	Pedestrians	1,120	773	715	-8%	-36% *
	Pedal cyclists	404	475	419	-12%	4%
	Powered two-wheeler	748	488	499	2%	-33% *
	Car occupants	900	310	297	-4%	-67% *
	Bus or coach occupants	137	89	71	-20%	-48% *
	Other vehicle occupants	107	57	39	-32%	-63% *
	Total	3,416	2,192	2,040	-7% *	-40% *
Child fatal and serious	Child pedestrians	232	153	139	-9%	-40% *
	Child pedal cyclists	33	17	13	-24%	-60% *
	Child car passengers	42	7	6	-14%	-86% *
	Child bus/coach passenger	12	4	5	25%	-57%
	Other child casualties	12	6	3	-50%	-75% *
	Children (under 16 years)	330	187	166	-11%	-50% *
Slight	Pedestrians	4,214	4,343	4834	11% *	15% *
	Pedal cyclists	2,718	4,134	4714	14% *	73% *
	Powered two-wheeler	3,806	3,992	4707	18% *	24% *
	Car occupants	12,427	9,850	11487	17% *	-8% *
	Bus or coach occupants	1,430	1,381	1508	9% *	5%
	Other vehicle occupants	1,005	1,175	1368	16% *	36% *
	Total	25,600	24,875	28618	15% *	12% *
	Children (under 16 years)	1,889	1,677	1811	8% *	-4%
All severities	Pedestrians	5,430	5,181	5613	8% *	3% *
	Pedal cyclists	3,139	4,623	5146	11% *	64% *
	Powered two-wheeler	4,598	4,502	5233	16% *	14% *
	Car occupants	13,376	10,185	11803	16% *	-12% *
	Bus or coach occupants	1,569	1,471	1579	7%	1%
	Other vehicle occupants	1,115	1,237	1411	14% *	27% *
	Total	29,227	27,199	30785	13% *	5% *
	Children (under 16 years)	2,219	1,864	1977	6%	-11% *

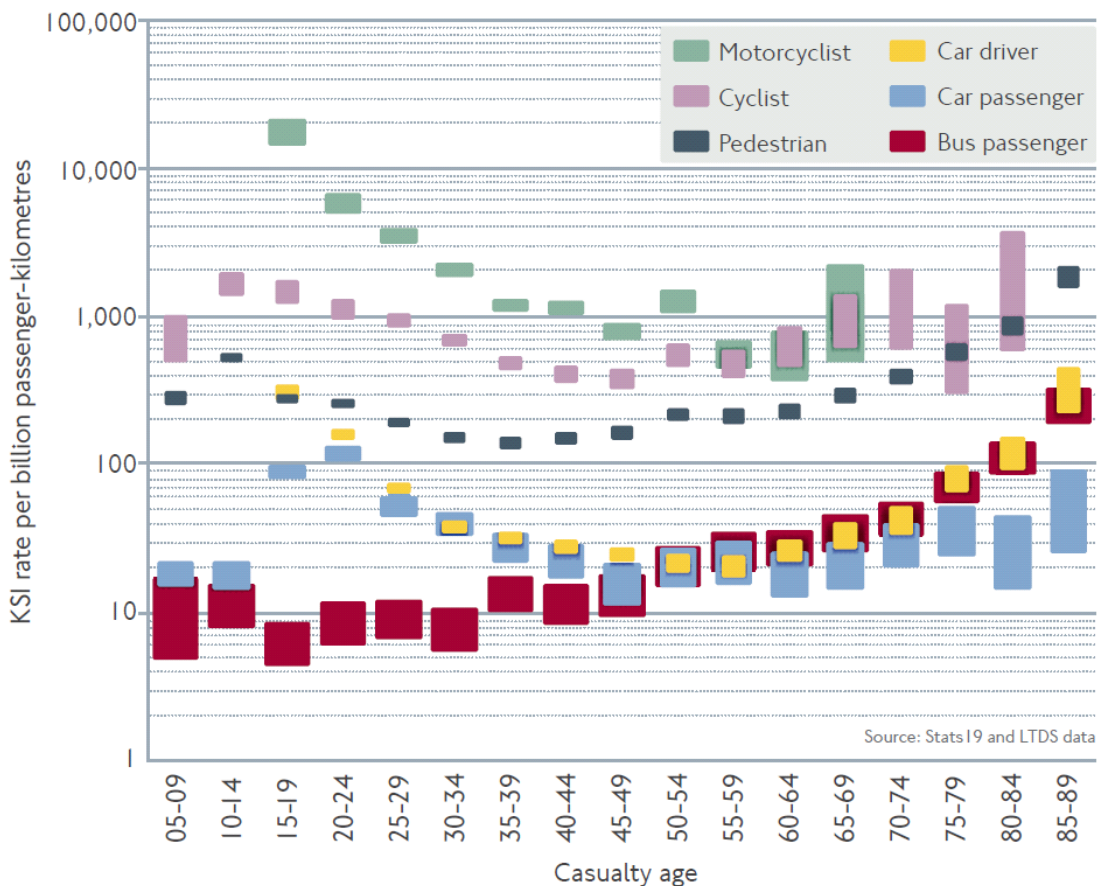
* Statistically significant changes at the 95 per cent confidence level

4.3. This dataset has been maintained for a number of years and so year by year comparisons and trends are possible. But, there is great variability from one

year to the next; comparisons of one year with a previous is not advised. Typically, it is the trend over a number of years that is a better indicator.

- 4.4. These statistics are absolute numbers of casualties (or collisions) and so do not reflect the volume of travel. As a comparison, motorcycling has both the highest rate of casualties per mile travelled and, in absolute terms, high numbers of casualties. Walking has the highest number of casualties, but because of the volume of walking undertaken, the rate (per kilometre travelled) is much lower than motorcycling. TfL have recently sought to reflect these distinctions by combining the road safety statistics with other data to produce a very interesting graph. **Please note: the vertical scale is logarithmic** to accommodate the very high casualty rate of motorcycling. So for example there are 200, 15 to 19 year old pedestrian casualties per billion kilometres compared to 11,000 motorcyclist casualties. Pedestrians, cyclists and motorcyclists are regarded as the 'vulnerable modes' and these modes are prioritised for interventions.

Figure I: Casualty rate per billion kilometres by age for each mode



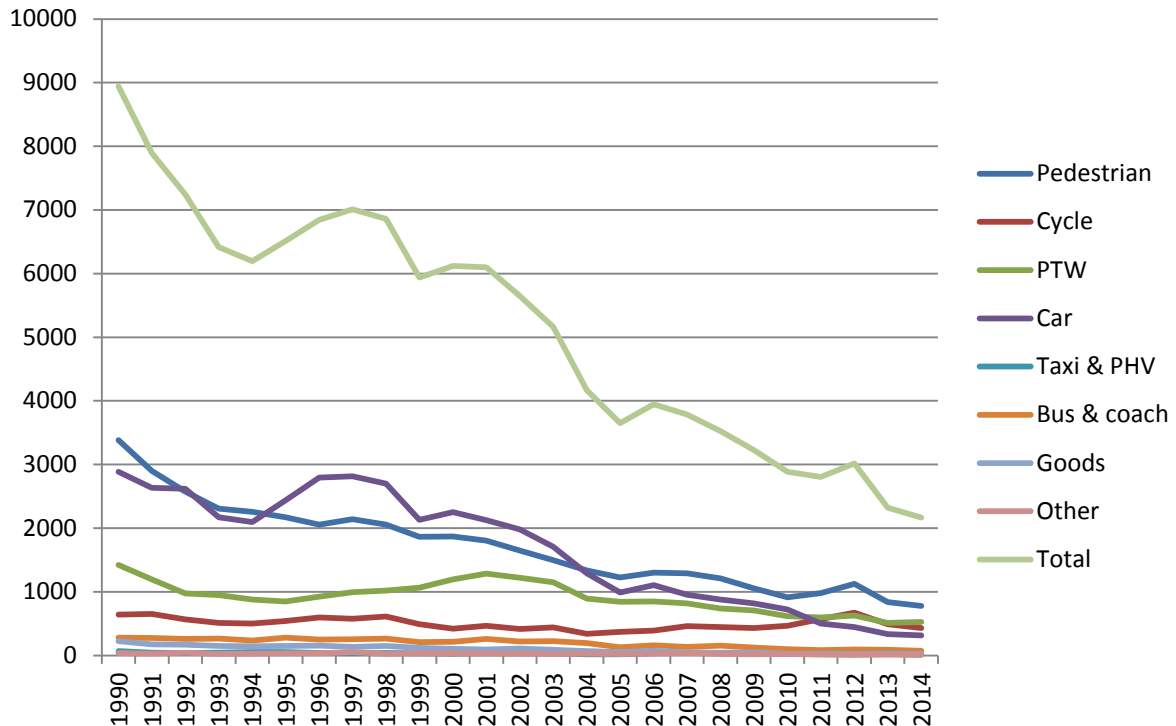
- 4.5. International comparisons are difficult. There is a consensus that the UK does well in terms of road safety generally, but less well in terms of child casualties.

5 London road safety statistics over the past 25 years

- 5.1. The annual statistics are often presented graphically either as casualties or collisions. The number of casualties is often higher than the number of

collisions that caused them due to there sometimes being multiple casualties. The data is often presented by mode or as a total – see below.

Number of collisions resulting in killed and serious injuries, by mode, over 25 years



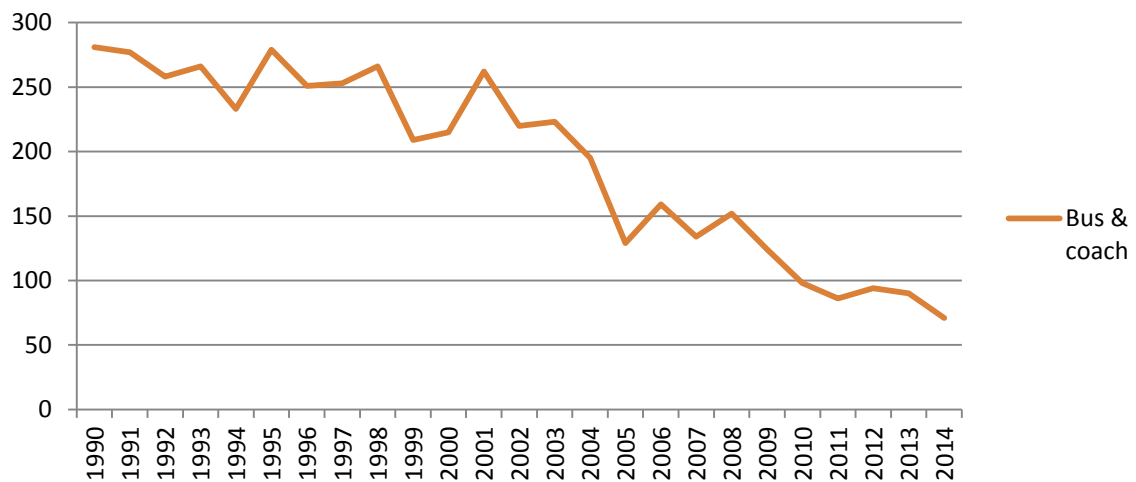
5.2. The above graph shows a generally declining level of collisions on London’s roads over the last 25 years. As discussed at the 26 January 2016 Board meeting, the number of cycling casualties/collisions has increased with the growth in volumes of cycle journeys, though the rate of injury is declining. London’s population has also increased over this period.

6 Bus and coach, road safety statistics

6.1. Police records report bus and coach road safety statistics. They record only the casualties that are occupants of the bus or coach. They do not differentiate between buses operated under a TfL contract and all other buses and coaches operating in the London area, such as commuter coaches and sight-seeing tour buses. Nor do they record injuries that occur as a result of a fall on the bus etc. that is unrelated to a collision. These ‘Stats 19’ figures for buses and coaches are represented in the graph below. [Pedestrians injured as a result of a road collision with buses or coaches will be reported by the police as a pedestrian casualty with the other vehicle involved being a bus or coach.]

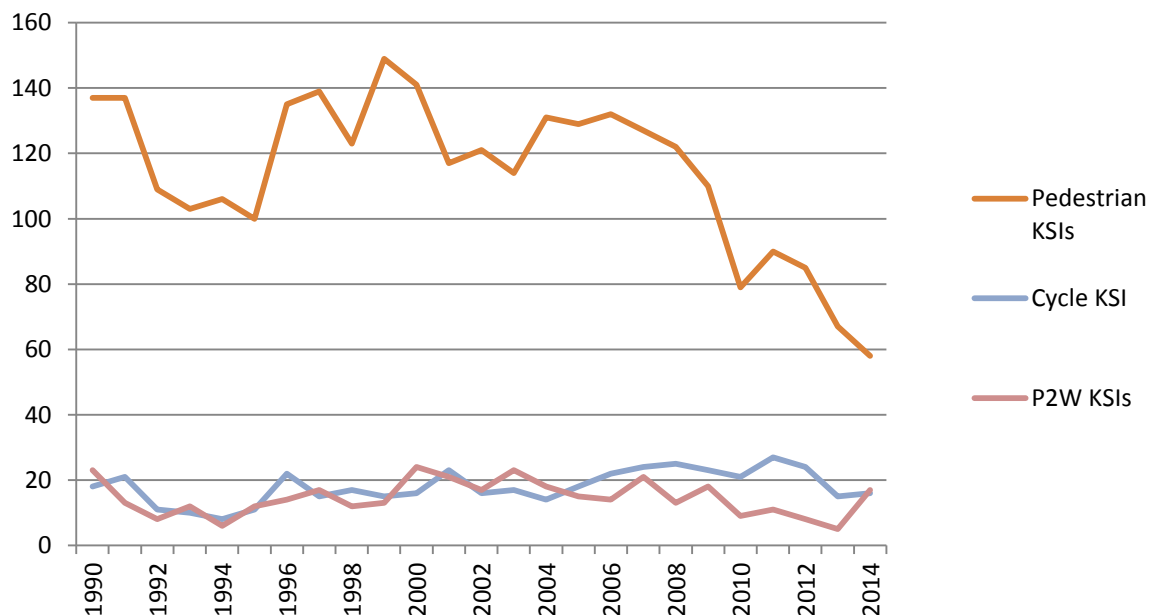
6.2. It should be noted that, as well as population growth there has also been a rise in bus mileage of 43% since 1997.

Number of bus and coach collisions involving a casualty whom was an occupant of the bus or coach by year in London



6.3. 'Stats 19' data will report the 'other vehicles' involved and so a pedestrian, say, injured by a collision where a bus or coach is involved could be identified. Please note there is no way of identifying if the other vehicle were a London bus service, coach or other bus service, nor if the bus was the only other vehicle involved.

Number of collisions involving a pedestrian, cyclist or motorcycle where another vehicle was bus or coach



7 Bus safety statistics reported by the bus operators

7.1. Alongside these statistics, TfL has (from Q1 2014) started to report bus safety statistics associated with the vehicles they contract to be operated,

i.e. London service buses. This information can be found on the TfL website: <https://tfl.gov.uk/corporate/publications-and-reports/bus-safety-data>

- 7.2. The information is derived from bus operators reporting directly to TfL on the incidents associated with their buses. It is presented by bus route; borough; bus operator and all-data for each quarter. Early reporting (prior to and including Q3 2014) only included those incidents that resulted in the casualty being a fatality or taken to hospital. Since Q4 2014 all fatality, injury and non-injury incidents are reported.
- 7.3. TfL's bus operator safety data shows that, for example, in Q1 2014, two pedestrians were killed in collisions with buses. 283 incidents were reported where the casualty was taken to hospital. The 283 non-fatal incidents were categorised as below.

	Passengers	Bus drivers or TfL staff	Pedestrian, rider, driver etc	Total
Alighting incident	10			10
Assaults	1	5	1	7
Boarding incident	22			22
Collisions	21	11	51	83
Fall down stairs	13	0	0	13
Knocked, tripped or fell	118	1		119
Other driving incident	2	1	2	5
Other non-driving incident	1	1	2	4
Slip, trip or fall outside bus	4	3	6	13
Struck by an object	1	0	0	1
Vandalism	0	1	0	1
Wheelchair/buggy incident	5	0	0	5
Total				283

- 7.4. Looking at collisions resulting in treatment at hospital, it is possible to identify the injured party and whether or not they were a passenger on the bus or a third party. The number of these collision incidents is tabulated and appended. For example, in Q1 2014 there were 36 pedestrian injuries involving TfL contracted buses that resulted in a fatality or an injury treated at hospital. This data is not reconciled with police statistics, nor is the severity of injury always known.
- 7.5. London TravelWatch does not deal with many of these incidents. This is because they will often be passengers etc seeking compensation from the bus operator, which will often be a legal claim against an insurer.

8 London TravelWatch priority

- 8.1. Members have asked that the Board review its approach to reporting road safety statistics. Members are advised that the primary (legal) responsibility for investigating collisions lies with the local highway authorities and the

Metropolitan Police Service whom are both funded to undertake this work. On-bus injury is investigated by the bus industry. London TravelWatch could more appropriately consider research looking at on-bus injuries.

9 Legal powers

- 9.1. Section 248 of the Greater London Authority Act 1999 places upon London TravelWatch (as the London Transport Users Committee) a duty to consider - and where it appears to the Committee to be desirable, to make recommendations with respect to - any matter affecting the functions of the Greater London Authority or Transport for London which relate to transport (other than of freight).

10 Financial implications

- 10.1. There is no financial implication for London TravelWatch because of this report. London TravelWatch would only undertake the work described in paragraph 3.2 if external funding were to be found.

Appendix

Transport for London

<https://www.tfl.gov.uk/roadsafety>

Table 7. Reported road casualties by severity and road user: Quarter 2 (01 April to 30 June) 2015, Greater London

				Percentage change compared with same quarter last year
		Q2 2014 A	Q2 2015 B	Percentage change (B-A)/A %
ALL CASUALTIES				
Pedestrians				
	Killed	13	9	-31%
	KSI	187	173	-7%
	Slightly injured	1,135	1,058	-7%
	All casualties	1,322	1,231	-7%
Pedal cyclists				
	Killed	4	4	0%
	KSI	133	110	-17%
	Slightly injured	1,269	1,125	-11% *
	All casualties	1,402	1,235	-12% *
Motorcycle users				
	Killed	4	9	125%
	KSI	123	128	4%
	Slightly injured	1,140	1,182	4%
	All casualties	1,263	1,310	4%
Car users				
	Killed	6	4	-33%
	KSI	78	72	-8%
	Slightly injured	2,967	2,818	-5%
	All casualties	3,045	2,890	-5% *
Taxi & Private hire users				
	Killed	0	1	-
	KSI	1	7	600%
	Slightly	156	174	12%

injured				
	All casualties	157	181	15%
Bus or Coach users				
	Killed	0	0	-
	KSI	23	16	-30%
	Slightly injured	410	409	0%
	All casualties	433	425	-2%
Goods Vehicle users				
	Killed	0	0	-
	KSI	7	4	-43%
	Slightly injured	166	130	-22% *
	All casualties	173	134	-23% *
Other Vehicle users				
	Killed	0	0	-
	KSI	1	0	-100%
	Slightly injured	16	12	-25%
	All casualties	17	12	-29%
All road users				
	Killed	27	27	0%
	KSI	553	510	-8%
	Slightly injured	7,259	6,908	-5% *
	All casualties	7,812	7,418	-5% *
CHILD CASUALTIES				
Pedestrians				
	Killed	0	0	-
	KSI	42	37	-12%
	Slightly injured	221	226	2%
	All casualties	263	263	0%
All road users				
	Killed	0	0	-
	KSI	51	44	-14%
	Slightly injured	491	484	-1%
	All casualties	542	528	-3%

P: provisional figures

KSI: Killed or Seriously Injured