Contributory factors to road accidents

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Summary

This article describes the scope and limitations of the information on contributory factors recently added to the national road accident reporting system and presents results from the first year of collection, including:

- *Failed to look properly* was the most frequently reported contributory factor and was involved in 32 per cent of all accidents. Five of the six most frequently reported contributory factors were some kind of driver or rider error or reaction. For fatal accidents the most frequently reported contributory factor was *loss of control*, which was involved in 35 per cent of fatal accidents.

- *Exceeding the speed limit* or *going too fast for conditions* were reported as a contributory factor in 15 per cent of all accidents. However, the factor became more significant with the severity of the accident; it was reported as contributory factor in 26 per cent of fatal accidents and these accidents accounted for 28 per cent of all fatalities (793 deaths).

- Eight times more male than female drivers or riders involved in road accidents were reported as *exceeding the speed limit*.

Introduction

In 2005 a new question on the factors which contributed to injury accidents was introduced to the national road accident reporting system. The system has always contained a great deal of information about the circumstances of the accident, the vehicles involved and their manoeuvres and the consequent casualties. However, it primarily answers questions about the 'where', 'when' and 'who' of an accident. The new contributory factors system has been developed to provide some insight into the 'why' and 'how' they occur. They are designed to give the key actions and failures that led directly to the actual impact to aid investigation of how accidents might be prevented. The contributory factors are largely subjective reflecting the opinion of the reporting police officer and are not necessarily the result of extensive investigation. Some factors are less likely to be recorded since evidence may not be available after the event. While this information will be valuable in helping to identify ways of improving safety, care should be taken in its interpretation.

Part 1 of this article explains the scope of the system, along with the limitations of its use. In addition the article presents the headline findings and some general analysis from the first year of operation. However, much of the value of this new data is in assessing what happens in particular types of accident. Part 2 gives some examples of this kind of analysis using some factors related to speed.

Part 1 – Contributory factor system and general analysis

Contributory factor data

The STATS19 national system of collection of information on road accidents involving human injury gives considerable information about the circumstances of the accident including who the victims are, what types of vehicle are involved and what they are doing at the time of the accident and the general conditions at the time. However, until 2005 it did not routinely include information on the main reasons why road accidents happen.

Between 1999 and 2004 data on contributory factors were collected on a trial basis by 15 police forces. Some concerns were expressed about this trial system, for example some common types of accidents were difficult to describe. As a result of the consultation for the 2002-03 Quality Review of the Collection of Road Accident Statistics, a revised specification for the inclusion of contributory factor data in STATS19 was introduced. From 2005 all police forces in Great Britain began reporting contributory factors as an integral part of the STATS19 collection system. It is important to note that whilst in some cases the contributory factor data collected from 2005 is similar to that collected during the trial, it is not possible to undertake a direct comparison of the results.

The contributory factors in a road accident are the key actions and failures that led directly to the actual impact. They show why the accident occurred and give clues about how it may have been prevented. The contributory factors are largely subjective and depend on the skill and experience of the investigating officer to reconstruct the events which led directly to the accident. The contributory factors reflect the reporting officer's opinion at the time of reporting and are not necessarily the result of extensive investigation. Furthermore, it is recognised that subsequent enquiries could lead to the reporting officer changing his opinion. The contributory factors are therefore different in nature from the remainder of the STATS19 data which is based on the reporting of factual information. This should be kept in mind when interpreting the data.

The contributory factor system allows the recording of up to six factors in those accidents reported at scene by the police. Multiple factors may be recorded against an individual participant in the accident (a driver/rider, a pedestrian casualty, a passenger casualty or an uninjured pedestrian), or an individual vehicle (for vehicle defects). Where the road environment was a contributory factor to the accident this can be recorded against any of the participants. Any given factor may be assigned to a number of participants. Both accidents and vehicles can have more than one contributory factor attributed to them, therefore percentages in this article will not necessarily add up to 100. On average 2.4 contributory factors per accident are reported.

The form used by the police to report contributory factors can be found towards the rear of the publication Road Casualties Great Britain 2005: Annual Report (see contents page). The form includes the full list of all 77 contributory factors used by the police.

It is important to note that where some factors may have contributed to the cause of an accident it may be difficult for a police officer attending the scene after the accident

has occurred to identify these factors. As a result some contributory factors may be less likely to be reported. For instance, while factors such as e*mergency vehicle on a call* or *defective traffic signals* may be more obvious for a police officer attending the scene and so may be reported with some confidence, for other factors, such as *exceeding speed limit* or *driver nervous, uncertain or panicked*, it may not always be possible for the police officer to identify whether these factors took place and contributed to the accident. In addition, contributory factors are disclosable in court and police officers would require some supporting evidence before reporting certain factors.

For each of the contributory factors given in an accident the police officer will indicate whether the factor is 'very likely' or 'possible'. In this article no distinction is made between these two categories, but they can be used for future analysis.

A contributory factor example:

"A car driver is travelling at 40 miles per hour along a residential road with street lights late in the evening whilst talking on a mobile phone. The driver hits a child playing in the road wearing dark clothes".

Both participants in this accident had at least one contributory factor in this accident. The police officer may have coded the accident up as follows:

Contributory factor	**Which participant?**	**Confidence?**
Driver using mobile phone	Driver	Possible
Exceeding speed limit	Driver	Possible
Dangerous action in carriageway	Casualty	Very likely
Pedestrian wearing dark clothing at night	Casualty	Very likely

Additionally both participants in this example could also have been attributed *failed to look properly* (or in the case of the child *pedestrian failed to look properly*) as a factor. This is consistent with the data in the tables below which show *failed to look properly* as the most frequently reported contributory factor.

If the police officer had no evidence that the driver of the vehicle that hit the child was exceeding the speed limit (skid marks for instance) he may only suspect that this was the case and so code the factor only as 'possible'. The police officer may also have to rely on information from one of the participants to identify whether or not the driver was using a mobile phone.

As 2005 was the first year in which the new contributory factor system was used the data may contain a small number of reporting errors. For instance, going too fast for the conditions should always be attributed to the driver even if they are also a casualty, however in a small number of cases it has been attributed to a casualty. For later years it may be possible to introduce validation checks to reduce these errors.

For accidents in which a police officer did not attend the scene it may not be possible for the reporting officer to accurately report the correct contributory factors. As a result, the analysis shown here only includes accidents in which a police officer attended the scene. In 2005, 80 per cent of accidents met this condition.

From 1 January 2005 contributory factors were to be reported for all accidents. However, during January and February of 2005, only 80 per cent of accidents had contributory factors reported. For the whole of 2005, 91 per cent accidents had contributory factors reported. Accidents which had no contributory factor reported are excluded from this analysis.

Table 1 shows the proportion of accidents and vehicles that satisfied both of the above conditions, shown for different accident severities, road types and vehicle types.

- In 2005, 74 per cent of all accidents satisfied both conditions and these accidents are the basis for the analysis in this article.
- 90 per cent of fatal accidents satisfied these conditions, compared with 72 per cent of slight accidents.
- 85 per cent of accidents occurring on motorways satisfied these conditions, compared with 76 per cent and 75 per cent for A roads and B roads respectively.
- 75 per cent of vehicles were involved in accidents in 2005 that satisfied these conditions.
- Over 80 per cent of Heavy Goods Vehicles and motorcycles involved in accidents in 2005 are included in this analysis. This compares with less than 65 per cent of pedal cycles and buses or coaches.

Table 1: Accidents and vehicles included in analysis[1]: GB 2005

Category	Number included in analysis[1]	Total number in 2005	Per cent included in analysis[1]
Accidents			
Accident severity			
Fatal	2,613	2,913	*90*
Serious	21,280	25,029	*85*
Slight	123,616	170,793	*72*
Road type			
Motorways	7,365	8,619	*85*
A roads	67,744	88,599	*76*
B roads	18,718	24,991	*75*
Other Roads[2]	53,682	76,526	*70*
Accidents included in analysis	**147,509**	**198,735**	*74*
Vehicles			
Vehicle type			
Pedal cycles	10,709	17,039	*63*
Motorcycles	20,921	25,870	*81*
Cars	210,798	281,810	*75*
Buses or coaches	6,078	9,988	*61*
Light goods vehicles	12,122	16,078	*75*
Heavy goods vehicles	9,992	12,120	*82*
Other vehicles	2,376	3,331	*71*
Vehicles included in analysis[3]	**272,996**	**366,236**	*75*

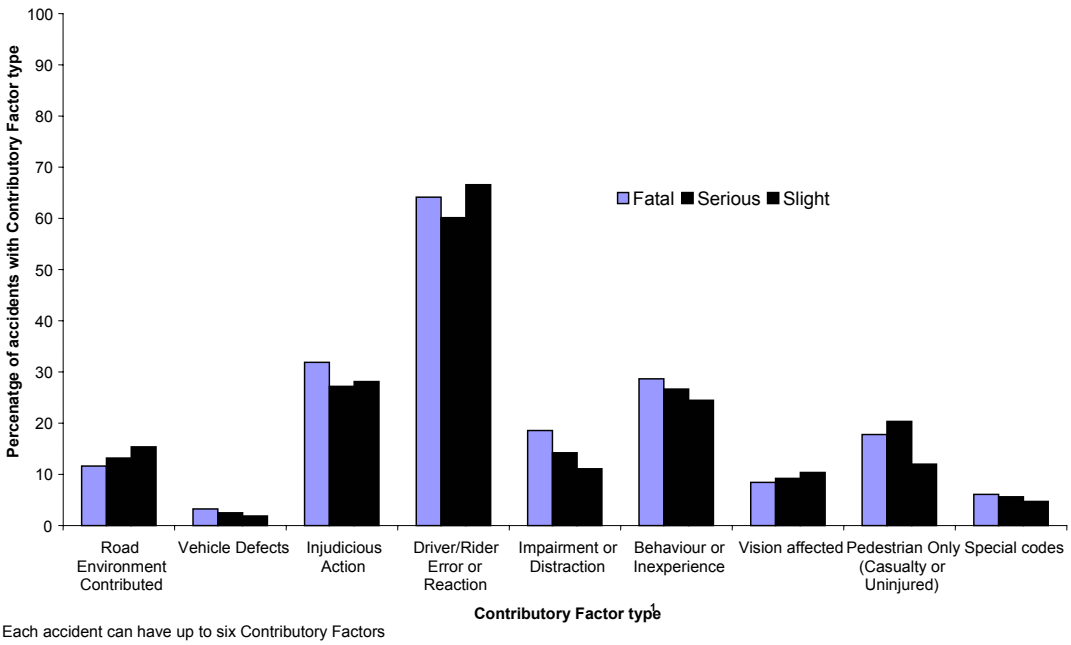
1 Includes accidents and vehicles involved in accidents where a police officer attended the scene and in which a contributory factor was reported.

2 Other roads includes C roads and unclassified roads.

3 Includes other vehicles types and cases where the vehicle type was not reported.

2005 results

Chart 1: Contributory Factor type[1]: accidents by severity: GB 2005



1 Each accident can have up to six Contributory Factors

Each of the 77 contributory factors fits into one of nine categories. Chart 1 shows the percentage of accidents in each category.

- The contributory factor category *driver/rider error or reaction* was the most frequently reported category, involved in 66 per cent of all accidents. It was also the most frequently reported type for each severity of accident.
- *Injudicious action* (including *going too fast for conditions, following too close* and *exceeding speed limit*) was the second most frequently reported category, involved in 28 per cent of all accidents. However this increases to 32 per cent of fatal accidents.
- Special codes (including *stolen vehicle*, *vehicle in course of crime* and *emergency vehicle on a call*) were reported for 5 per cent of all accidents.
- Pedestrian contributory factors, which are those where the factor has been attributed to an injured or uninjured pedestrian involved in the accident, were reported in 13 per cent of all accidents and 18 per cent of fatal accidents.

Table 2: Contributory factors: Accidents[1] by severity: GB 2005

Percentage of accidents[1,2]

Contributory factor reported in accident	Fatal	Serious	Slight	All accidents
Road Environment Contributed	***12***	***13***	***15***	***15***
Poor or defective road surface	*1*	*1*	*1*	*1*
Deposit on road	*1*	*2*	*1*	*1*
Slippery road	*6*	*8*	*10*	*10*
Inadequate/masked signs or markings	*1*	*0*	*1*	*1*
Defective traffic signals	*0*	*0*	*0*	*0*
Traffic calming	*0*	*0*	*0*	*0*
Temporary road layout	*0*	*0*	*0*	*0*
Road layout	*4*	*3*	*3*	*3*
Animal/Object in carriageway	*1*	*1*	*1*	*1*
Vehicle Defects	***3***	***2***	***2***	***2***
Defective tyres	*2*	*1*	*1*	*1*
Defective lights/indicators	*0*	*0*	*0*	*0*
Defective brakes	*1*	*1*	*1*	*1*
Defective steering/suspension	*0*	*0*	*0*	*0*
Defective mirrors	*0*	*0*	*0*	*0*
Overloaded vehicle	*0*	*0*	*0*	*0*
Injudicious Action	***32***	***27***	***28***	***28***
Disobeyed traffic signal	*1*	*1*	*2*	*2*
Disobeyed Give Way or Stop sign	*2*	*3*	*4*	*4*
Disobeyed double white lines	*1*	*1*	*0*	*0*
Disobeyed pedestrian crossing	*1*	*1*	*0*	*1*
Illegal turn/direction	*1*	*1*	*1*	*1*
Exceeding speed limit	*12*	*7*	*4*	*5*
Going too fast for conditions	*17*	*13*	*11*	*12*
Following too close	*1*	*3*	*8*	*7*
Vehicle travelling along pavement	*0*	*0*	*0*	*0*
Cyclist entering road from pavement	*1*	*1*	*1*	*1*
Driver/Rider Error or Reaction	***64***	***60***	***67***	***66***
Junction overshoot	*2*	*2*	*2*	*2*
Junction restart	*1*	*1*	*2*	*2*
Poor turn/manoeuvre	*12*	*15*	*15*	*15*
Failed/Misleading signal	*1*	*1*	*2*	*2*
Failed to look properly	*17*	*26*	*33*	*32*
Failed to judge other persons path/speed	*10*	*13*	*19*	*18*
Passing to close to cyclist etc	*1*	*1*	*1*	*1*
Sudden braking	*3*	*4*	*8*	*7*
Swerved	*7*	*4*	*4*	*4*
Loss of control	*35*	*20*	*13*	*14*

	Percentage of accidents[1,2]			
Contributory factor reported in accident	Fatal	Serious	Slight	All accidents
Impairment or Distraction	***19***	***14***	***11***	***12***
Impaired by alcohol	*9*	*8*	*5*	*5*
Impaired by drugs	*2*	*1*	*0*	*0*
Fatigue	*3*	*2*	*1*	*1*
Defective eyesight	*0*	*0*	*0*	*0*
Illness or disability	*3*	*2*	*1*	*1*
No lights at night	*0*	*0*	*0*	*0*
Cyclist wearing dark clothing at night	*0*	*0*	*0*	*0*
Driver using mobile phone	*0*	*0*	*0*	*0*
Distraction in vehicle	*2*	*2*	*2*	*2*
Distraction outside vehicle	*1*	*1*	*2*	*1*
Behaviour or Inexperience	***29***	***27***	***24***	***25***
Aggressive driving	*8*	*5*	*4*	*4*
Careless, reckless or in a hurry	*18*	*17*	*16*	*16*
Nervous, uncertain or panic	*1*	*1*	*2*	*2*
Driving too slow	*0*	*0*	*0*	*0*
Learner/Inexperienced driver	*5*	*5*	*5*	*5*
Inexperience of driving on left	*0*	*1*	*0*	*0*
Unfamiliar with model of vehicle	*1*	*1*	*1*	*1*
Vision Affected	***8***	***9***	***10***	***10***
Vision affected by parked vehicle	*1*	*3*	*3*	*3*
Vision affected by vegetation	*1*	*1*	*0*	*0*
Vision affected by road layout	*2*	*2*	*2*	*2*
Vision affected by buildings etc	*0*	*0*	*0*	*0*
Dazzling headlights	*0*	*0*	*0*	*0*
Dazzling sun	*2*	*2*	*2*	*2*
Rain, sleet, snow or fog	*1*	*1*	*2*	*2*
Spray	*0*	*0*	*0*	*0*
Dirty windscreen/visor	*0*	*0*	*0*	*0*
Vehicle blind spot	*1*	*1*	*1*	*1*
Pedestrian Only (Casualty or Uninjured)	***18***	***20***	***12***	***13***
Pedestrian masked when crossing	*1*	*4*	*2*	*3*
Pedestrian failed to look properly	*9*	*14*	*9*	*9*
Failed to judge vehicles path/speed	*5*	*4*	*3*	*3*
Wrong use of pedestrian crossing	*1*	*1*	*1*	*1*
Dangerous action in carriageway	*2*	*2*	*1*	*1*
Impaired by alcohol	*4*	*3*	*1*	*2*
Impaired by drugs	*0*	*0*	*0*	*0*
Careless, reckless or in a hurry	*4*	*6*	*4*	*4*
Pedestrian wearing dark clothing at night	*3*	*1*	*0*	*1*
Disability or illness	*2*	*1*	*0*	*0*
Special Codes	***6***	***6***	***5***	***5***
Stolen vehicle	*1*	*1*	*1*	*1*
Vehicle in course of crime	*0*	*0*	*0*	*0*
Emergency vehicle on call	*0*	*0*	*1*	*1*
Door opened carelessly	*0*	*0*	*0*	*0*
Other	*5*	*4*	*3*	*3*
Total number of accidents	**2,613**	**21,280**	**123,616**	**147,509**

1 Includes only accidents where a police officer attended the scene and in which a contributory factor was reported. Columns may not add up to 100 per cent as accidents can have more than one contributory factor.
2 0 indicates zero or negligible values – most are between 0.1%-0.5%

Table 2 shows the percentage of accidents in which each contributory factor was reported, including a breakdown into accident severity.

- *Failed to look properly* was the most frequently reported contributory factor and was involved in 32 per cent of all accidents. This was followed by *failed to judge other persons path/speed* (18 per cent) and *careless, reckless or in a hurry* (16 per cent).
- For fatal accidents the most frequently reported contributory factor was *loss of control*, which was involved in 35 per cent of fatal accidents. *Loss of control* was also the second largest contributory factor for serious accidents (20 per cent).
- Five of the six most frequently reported contributory factors were some kind of *driver/rider error or reaction*, which includes *failed to look properly* and *failed to judge other persons path/speed*.

Table 3: Contributory factors: vehicles[1] by vehicle type: GB 2005

Percentage of vehicles[4]

	Pedal cycles	Motor cycles	Cars	Buses or coaches	Light goods vehicles	Heavy goods vehicles	All Vehicles[3]
Failed to look properly	*25*	*14*	*18*	*15*	*20*	*20*	*18*
Failed to judge other persons path/speed	*7*	*10*	*10*	*7*	*12*	*12*	*10*
Careless, reckless or in a hurry	*8*	*9*	*9*	*5*	*10*	*7*	*9*
Poor turn/manoeuvre	*6*	*10*	*8*	*6*	*9*	*11*	*8*
Loss of control	*4*	*14*	*8*	*1*	*6*	*5*	*8*
Going too fast for conditions	*2*	*9*	*7*	*3*	*7*	*5*	*6*
Slippery road	*1*	*6*	*6*	*2*	*6*	*3*	*6*
Following too close	*1*	*4*	*4*	*4*	*7*	*6*	*4*
Sudden braking	*1*	*6*	*4*	*13*	*4*	*3*	*4*
Impaired by alcohol	*2*	*2*	*3*	*0*	*2*	*0*	*3*
Learner/Inexperienced driver	*2*	*9*	*3*	*0*	*1*	*0*	*3*
Exceeding speed limit	*0*	*4*	*3*	*0*	*2*	*1*	*3*
Disobeyed Give Way or Stop sign	*2*	*1*	*2*	*1*	*2*	*1*	*2*
Junction overshoot	*3*	*1*	*1*	*0*	*1*	*1*	*1*
Passing too close to cyclist etc.	*0*	*0*	*1*	*3*	*1*	*1*	*1*
Vehicle blind spot	*0*	*0*	*0*	*1*	*1*	*6*	*1*
Cyclist entering road from pavement	*11*	*0*	*0*	*0*	*0*	*0*	*0*
Cyclist wearing dark clothing at night	*3*	*0*	*0*	*0*	*0*	*0*	*0*
Vehicles with no contributory factor	*45*	*37*	*44*	*54*	*41*	*42*	43
Number of vehicles	**10,709**	**20,921**	**210,798**	**6,078**	**12,122**	**9,992**	**272,996**

1 Includes only vehicles in road accidents where a police officer attended the scene and in which a contributory factor was reported. Columns may not add up to 100 per cent as accidents can have more than one contributory factor.

2 Includes only the ten most frequent contributory factors for each vehicle type.

3 Includes other vehicles types and cases where the vehicle type was not reported. Table ranked by the percentages in this column

4 0 indicates zero or negligible values – most are between 0.1%-0.5%

Table 3 shows, for each vehicle type, the percentage of **vehicles** which had each contributory factor. The table shows the ten most frequently reported contributory factors for each vehicle type.

The percentages in this table are different from those in table 3 which gives the percentage of **accidents** with each contributory factor. For example when looking at *Failed to look properly* – 48,249 vehicles had this contributory factor out of a total of 272,966 vehicles (18 per cent of vehicles). The vehicles which had this contributory factor were in 46,516 accidents out of a total of 147,509 accidents (32 per cent of accidents). Part of the reason for the lower number when looking at the percentage of vehicles is that 118,003 (43 per cent of) vehicles involved in accidents had no contributory factor reported.

- *Failed to look properly* was the most frequently reported contributory factor for all of the vehicle types except motorcycles for which *loss of control* was slightly more frequent. Motorcycles also had the highest percentage (9 per cent) of *learner/inexperienced driver* as a contributory factor when compared to other vehicle types.

- *Sudden braking* was the second most frequently reported contributory factor for buses or coaches (13 per cent). 3 per cent of buses or coaches had *passing too close to cyclist* as a contributory factor. This was higher than any other vehicle type.
- *Cyclist entering road from pavement* was attributed to 11 per cent of pedal cycles in accidents and *cyclist wearing dark clothes* at night was attributed to 3 per cent.
- 6 per cent of Heavy Goods Vehicles (HGVs) involved in accidents had *vehicle blind spot* as a contributory factor.
- *Exceeding speed limit* was attributed to 3 per cent of cars involved in accidents, while *going too fast for conditions* was attributed to 7 per cent. For fatal accidents these figures are 7 per cent and 10 per cent respectively. These factors are covered in more detail in part 2 of this article.

Table 4: Contributory factors: Pedestrians[1]: GB 2005

Contributory factor attributed to pedestrian[3]	Percentage of accidents[2]: Accidents involving injured or killed pedestrians[4]	Accidents involving uninjured pedestrians[4]
Pedestrian failed to look properly	*53*	*36*
Careless, reckless or in a hurry	*24*	*27*
Failed to judge vehicles path/speed	*15*	*13*
Pedestrian masked when crossing	*16*	*4*
Impaired by alcohol	*10*	*10*
Dangerous action in carriageway	*7*	*9*
Disability or illness	*2*	*7*
Wrong use of pedestrian crossing	*5*	*4*
Pedestrian wearing dark clothing at night	*4*	*2*
Failed to look properly	*1*	*2*
Animal/Object in carriageway	*0*	*2*
Slippery road	*0*	*2*
Total number of accidents	**22,855**	**632**

1 Includes only pedestrians in road accidents where a police officer attended the scene and in which a contributory factor was reported. Columns may not add up to 100 per cent as accidents can have more than one contributory factor.
2 0 indicates zero or negligible values – most are between 0.1%-0.5%.
3 Includes only the ten most frequently reported contributory factors for both accidents involving injured or killed pedestrians and accidents involving uninjured pedestrians.
4 Accidents can involve both pedestrian casualties and uninjured pedestrians.

Table 4 shows contributory factors allocated to pedestrians. The table shows the ten most frequently reported contributory factors for both the percentage of accidents involving pedestrian casualties and the percentage of accidents involving uninjured pedestrians.

- *Pedestrian failed to look properly* was the most frequently reported contributory factor in both accidents involving injured or killed pedestrians and accidents involving uninjured pedestrians.
- In 16 per cent of accidents involving injured or killed pedestrians, the pedestrian casualty had *Pedestrian masked when crossing* as a contributory factor. The equivalent figure for uninjured pedestrians is 4 per cent.

Table 5: Contributory factors: Accidents[1] by road class: GB 2005

Percentage of accidents

Contributory factor reported in accident[2]	Motorways	A roads	B roads	Other Roads[3]	All roads[4]
Failed to look properly	*21*	*34*	*30*	*31*	*32*
Failed to judge other persons path/speed	*24*	*20*	*16*	*14*	*18*
Careless, reckless or in a hurry	*10*	*17*	*16*	*16*	*16*
Poor turn/manoeuvre	*12*	*17*	*14*	*13*	*15*
Loss of control	*20*	*14*	*17*	*13*	*14*
Going too fast for conditions	*12*	*12*	*13*	*11*	*12*
Slippery road	*8*	*9*	*13*	*10*	*10*
Pedestrian failed to look properly	*1*	*8*	*8*	*13*	*9*
Following too close	*18*	*9*	*6*	*4*	*7*
Sudden braking	*12*	*8*	*7*	*5*	*7*
Impaired by alcohol	*3*	*5*	*6*	*6*	*5*
Learner/Inexperienced driver	*3*	*4*	*6*	*6*	*5*
Swerved	*9*	*4*	*4*	*3*	*4*
Total number of accidents	**7,365**	**67,744**	**18,718**	**53,682**	**147,509**

1 Includes only accidents where a police officer attended the scene and in which a contributory factor was reported. Columns may not add up to 100 per cent as accidents can have more than one contributory factor.

2 Includes only the ten most frequent contributory factors for each road type.

3 Other roads includes C roads and unclassified roads.

4 Table ranked by the percentages in this column.

Table 5 shows contributory factors by road class. The table shows the ten most frequently reported contributory factors for each road type.

- *Failed to look properly* was the most frequently reported contributory factor for all road classes except motorways for which *failed to judge other persons path/speed* was a contributory factor in 24 per cent of accidents. This is compared with 21 per cent for *failed to look properly*.
- *Following too close* was a contributory factor in 18 per cent of accidents on motorways compared with 9 per cent for A roads and 6 per cent for B roads. Similarly, motorways also had the highest percentage of accidents which involved either *sudden braking* or *swerved* as contributory factors when compared to other road types.
- B roads had slippery road as a contributory factor in 13 per cent of accidents compared with 8 per cent for motorways and 9 per cent for A roads.

The tables above give an overview of the contributory factors involved in all accidents. However, contributory factors can be most useful when looking at a particular subsection of accidents, for example, accidents involving young drivers or child pedestrians. In these more specific circumstances the use of contributory factors can be an important analysis tool to give insight into the possible causes of different types of accidents, and may help to develop policy to reduce road casualties.

Part 2 of this article gives an example of the kinds of analysis possible using contributory factor data.

Part 2 – Accidents involving speed as a contributory factor

This part of the article gives some information on accidents involving two contributory factors which relate to speed - *exceeding the speed limit* and *going too fast for the conditions*. As stated in part 1 of this article, the contributory factors are the opinions of police officers based on the evidence available to them at the time of reporting the accident. As a result some contributory factors may be less likely to be reported. These two factors relating to speed may be difficult to determine after the event, especially in less serious accidents. Other factors, which are easier to determine after the event, may also indicate the involvement of inappropriate or excessive speed. These include *loss of control, following too close* and *sudden braking.*

The definitions of the two factors considered are:

> *Exceeding the speed limit* should be reported when the driver caused, or contributed to the accident by exceeding the posted speed limit. It should also be reported when the actions of another road user were the immediate cause of the accident but a speeding vehicle also contributed to the collision.
>
> *Travelling too fast for conditions* should be reported when the driver was travelling within the speed limit, but their speed was not appropriate for the road conditions and contributed to the accident.

It should be noted that if a driver was *exceeding the speed limit* **and** *travelling too fast for the conditions,* reporting officers are asked to report it as the former, however in a number of cases both factors are reported. For the purpose of part of the article these drivers are counted only as *exceeding the speed limit*. As a result the figures for *going too fast for conditions* in table 6 are different from the figures in table 2. Table 6 shows the number and percentage of accidents in which the two contributory factors were reported.

Table 6: Speed as a contributory factor: Accidents by severity: GB 2005

Number of accidents /percentage of accidents with contributory factor[1]

Contributory factor	Fatal		Serious		Slight		Total	
	Number	*Percentage*	Number	*Percentage*	Number	*Percentage*	Number	*Percentage*
Exceeding speed limit	325	*12*	1,507	*7*	5,482	*4*	7,314	*5*
Going too fast for conditions[5]	357	*14*	2,371	*11*	12,708	*10*	15,436	*10*
Exceeding speed limit or going too fast for conditions[4]	686	*26*	3,896	*18*	18,223	*15*	22,805	*15*
Total number of accidents[2,3]	2,613	*100*	21,280	*100*	123,616	*100*	147,509	*100*

1 The number/percentage of accidents in which at least one vehicle had the contributory factor.

2 The total number of accidents for each accident severity.

3 Includes accidents and vehicles involved in accidents where a police officer attended the scene and in which a contributory factor was reported.

4 May add up to less than the total of both exceeding the speed limit and going too fast for conditions as an accident could involve 2 (or more) vehicles each with one of the factors.

5 Excluding vehicles in accidents which had both exceeding the speed limit and going too fast for conditions as a contributory factor.

Exceeding the speed limit was reported as a contributory factor in 5 per cent of all accidents. However, the factor became more significant with the severity of the accident. It was reported as contributory factor in 12 per cent of fatal accidents and these accidents accounted for 14 per cent of all fatalities. Accidents that involved *exceeding the speed limit* as a contributory factor were over twice as likely to result in at least one fatality compared to those that did not. The factor *going too fast for conditions* was a contributory factor in 10 per cent of accidents. Again the proportion of accidents where it was cited rose with severity of accident and 14 per cent of fatal accidents involved a contributory factor of *vehicle going too fast for the conditions*. Over a quarter of fatal accidents involved a vehicle either *exceeding the speed limit* or *going too fast for conditions* and these accidents resulted in 28 per cent of all fatalities. This is not the sum of the individual factors since some accidents involve one vehicle exceeding the speed limit and another vehicle going too fast for the conditions.

It should also be recognised that excessive speed can contribute significantly to the severity of the accident. Table 6 shows that either *exceeding speed limit* or *going too fast for conditions* are more likely to be a factor in fatal accidents. Table 7 shows that 12 per cent of cars which hit and killed a pedestrian had either *exceeding speed limit* or *going too fast for conditions* as a contributory factor.

Table 7: Speed as a contributory factor: Pedestrians hit by cars in single vehicle accidents[1]: GB 2005

Percentage of pedestrian casualties hit by a car with contributory factor

contributory factor attributed to car	Fatal	Serious	Slight
Exceeding speed limit	*6*	*2*	*1*
Going too fast for conditions[2]	*6*	*4*	*3*
Exceeding speed limit or going too fast for conditions	*12*	*6*	*4*
Total number of pedestrians hit by a car	333	3,956	13,627

1 Only includes accidents in which the car was the only vehicle, a police officer attended the scene and a contributory factor was reported.
2 Excluding cars which had both exceeding the speed limit and going too fast for conditions as a contributory factor.

83 per cent of all vehicles in accidents that had *exceeding the speed limit* as a contributory factor were cars, 12 per cent were motorcycles and 3 per cent were light goods vehicles. For fatal accidents 63 per cent were cars, 32 per cent were motorcycles and 3 per cent were light goods vehicles.

79 per cent of all vehicles in accidents that had going *too fast for conditions* as a contributory factor were cars, 10 per cent were motorcycles and 5 per cent were light goods vehicles. For fatal accidents 70 per cent were cars, 21 per cent were motorcycles and 4 per cent were light goods vehicles.

Whilst only 7 per cent of the vehicles involved in accidents are motorcycles, speed seems to be a major factor for this group. Table 8 shows that over a fifth of motorcycles in fatal accidents in which they were the only vehicle were *exceeding the*

speed limit and a third were either *exceeding the speed limit* or *going too fast for conditions*.

Table 8: Speed as a contributory factor: motorcycles in single vehicle accidents[1]: GB 2005

	Percentage of motorcycles with contributory factor		
	Severity of accident		
contributory factor attributed to motorcycles	Fatal	Serious	Slight
Exceeding speed limit	*23*	*8*	*3*
Going too fast for conditions[2]	*12*	*12*	*12*
Exceeding speed limit or going too fast for conditions	*35*	*21*	*15*
Total number of motorcycles in accidents	120	1,158	1,984

1 Only includes accidents in which the motorcycle was the only vehicle and there were no pedestrians, a police officer attended the scene and a contributory factor was reported.
2 Excluding motorcycles which had both exceeding the speed limit and going too fast for conditions as a contributory factor.

Eight times more male than female drivers or riders involved in road accidents were reported as *exceeding the speed limit* and four times more male than female drivers or riders involved in road accidents were reported as *going too fast for conditions*. 17 to 19 year old drivers or riders in accidents were more likely to have *exceeding the speed limit* or *going too fast for conditions* as a contributory factor than older drivers. In general, the older the driver or rider involved in an accident the less likely they are to have been driving too fast.