



National Statistics Quality Review Series

Report No.45

## **Review of Road Accident Statistics**

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## Preface

This is the 6th review to be completed under the National Statistics Travel, Transport and Tourism theme. This review report is divided into two parts. Part 1 details and presents the recommendations for change concerning the collection requirement and processing system which produces (STATS19) injury road accident data records. Part 2 sets out recommendations concerning the coverage and presentation of national road accident statistics produced from the data records, together with recommendations for improving access to both national statistics and the data records. The proposed response to the recommendations is set out in the Executive Summary (paragraph 2.7). It is published in paper format and mounted on the ONS and DfT web-sites.

This review has been conducted by the Standing Committee for Road Accident Statistics (SCRAS). The recommendations for change have been agreed by the committee which represents the interests of the police, local authorities and government. The Association of Chief Police Officers and the Association of Police Officers (Scotland), who advise on the police obligation to collect personal injury road accidents, have accepted these recommendations.

These agreed changes to STATS19 record were implemented on 1 January 2005. In addition the Department agreed to conduct research into the level of under-reporting in order to assess the size of the problem.

In addition, numerous recommendations have been agreed to improve the coverage and presentation of injury road accident statistics in national statistics publications. There are also recommendations to improve and extend access, not only to national road accident statistics, but also to road accident data records.

## **National Statistics Quality Reviews**

The White Paper Building Trust in Statistics sets out the framework for quality assuring National Statistics. A key component of the framework is:

“ a programme of thorough reviews of key outputs, at least every five years, with the involvement of methodologists and outside expertise, as appropriate. ”

This programme of quality reviews is an important way of ensuring that National Statistics and other official statistical outputs are fit for purpose and that we are continuing to improve the quality and value of these outputs

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## 1. REPORT OF INDEPENDENT ASSESSOR

This assessment is based upon full participation of the Assessor in the Review since his appointment in October 2001 and access to all papers relating to the whole period of the Review. The Assessor is grateful to the Review Manager and all other contributors to the Review for the welcoming way in which they have enabled his participation.

The assessment is structured in relation to the ONS *Guidance on the National Statistics Quality Review Programme – Version 1.3*.

This is a Standard Review, but has the following exceptional features.

- (a) There is a several-decade history of quinquennial reviews of the national road accident data system that had many of the attributes of today's National Statistics Quality Reviews, and have given rise to firmly established expectations of the review process on the part of the providers and users of the data. Since none of these expectations were seen as contradictory to the Guidance on the Review Programme, the Review was conducted in its new context in such a way as still to meet them.
- (b) The context for gathering of the road accident data is that only in certain circumstances are road users involved in injury accidents required to report them to the police, and it is by a voluntary arrangement that police forces undertake to record, for the purposes of the national road accident statistics, details of injury accidents which they attend or which are reported to them (See Section 8 of Part 1 of the Report). This means that the quality and coverage of these data depend on motivating the officers concerned and facilitating the recording task in the face of many competing demands on their time, rather than on either enforcement of a statutory requirement to report or achievement of performance in survey work by expenditure of money or exercise of professional skill.
- (c) The timescale is much longer than is usual for a Quality Review. Scoping and reporting of the Review were both achieved briskly, but the investigation stage was necessarily a good deal longer than in a more typical review because of the number of organisations rightly involved in the detailed identification, prioritisation and addressing of the relevant issues. This would have been the case even if the original target date of 1 January 2004 for the implementation of recommendations had been retained. In the event, the target date was put back to 1 January 2005 in order to allow the important issue of collection of contributory factors data to be addressed (See Recommendation 14 and Section 7 of Part 1 of the Report). This postponement was made with the full support of the Assessor; indeed, if the issue of contributory factors had not been addressed, the Review could not have been regarded as satisfactorily conducted.

The review was carried out in full cognisance of the multiplicity of uses and users of the data, and the high public profile of some of their principal uses – notably in the development and implementation of road safety policy and the monitoring of progress towards the national targets for road casualty reduction.

The Guidance states that the Review should:

- *be carried out in a manner which ensures transparency* – as achieved here by the widespread and thorough consultation outlined in Section 4 and 15 of the report, and the consultation response shown in Annex D and detailed in the minutes of meetings;
- *be managed using project management techniques* – as achieved here by the work of the Standing Committee on Road Accident Statistics (SCRAS) and its Working Group, in the roles of Review Board and Review Team respectively, and the exemplary leadership of Peter Wilding as Review Manager;

- *involve representatives from the producer, user and stakeholder communities* – as achieved here through the consultation process and the composition of the SCRAS and its Working Group, though it is for consideration whether in future reviews the Working Group might be augmented by, say, two or three representatives of the main kinds of non-governmental organisations that make substantial use of the data;
- *involve independent external participation* – as achieved here by the full participation of the Assessor; and
- *generate a report which recommends a range of improvements* – as achieved in Parts 1 and 2 of the Report.

The Guidance also states that “Programme Managers within ONS’s National Statistics and Policy Division will provide day to day project management support”. That the Assessor saw rather few signs of this may have been due to the confidence placed by the Programme Managers in the Review Manager, or to the unobtrusive nature of their support for the process.

The importance of the data to users and the extent to which their needs are met are addressed in Part 2 of the Report. Principal improvements to the data themselves and their collection are identified in Recommendations 1, 2, 7, 15-18, 23 and, looking ahead to the next review, 24. A number of possible improvements in dissemination of and access to the data are identified in Part 2 of the Report.

Justification and minimisation of the burden on providers are addressed in Sections 8 and 9 of Part 1 of the Report, and important issues of quality and information to users about quality are addressed in Sections 10-12 of Part 1 and Section 17 of Part 2.

The Assessor endorses the Recommendations listed in section 2.6 of the Report.

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## 2. EXECUTIVE SUMMARY

### 2.1 Scope

In England, personal injury road accident data are collected by the police and processed by local processing authorities (LPAs), mostly established in either local police or local authority headquarters before being submitted to the Department for Transport (DfT). In Scotland and Wales, the data are submitted to the Scottish Executive (SE) and the National Assembly for Wales (NAW) who copy the data to DfT for inclusion in its GB-wide database. Collectively, this collection and processing system is commonly referred to as the STATS19 collection system, named after the code number of the data collection form which specifies the collection requirement. This system produces road accident data records used by the police, local government and central government to inform road safety initiatives and policy. The data records also provide the basis for National Road Accident Statistics published by DfT, NAW and SE. From 1979, the STATS 19 collection system has been subjected to a regular quinquennial review to check that it continues to provide essential information for government, but minimises the burden of form filling and data provision upon local police forces and local authorities.

The quinquennial review process has now become part of an enhanced review process designed to improve public confidence in National Statistics generally. Consequently the 2002 review was organised in accordance with the National Statistics Quality Assurance Programme Board guidance paper 'Commissioning a National Statistics Review', following publication of the White Paper 'Building Trust In Statistics' (available on the Office of National Statistics web-site [www.statistics.gov.uk](http://www.statistics.gov.uk)).

This review report is presented in two parts. Part 1 is concerned with the recommendations for change concerning the process, coverage and definition of the STATS19 collection system, and the review process which produced the recommendations. Part 2, produced by Professor Richard Allsop, is concerned with the coverage and presentation of national road accident statistics in government publications and the wider question of accessibility to available data.

### 2.2 User needs, collection costs and status

Road accident statistics collected by the police are essential for informing and monitoring road safety policy at local, national, and international level. A full description of the uses of national road accident statistics can be found in Part 2 Section 17 of the report. While there is no specific statutory duty upon the police (or on local authorities) to collect and supply STATS19 road accident data to central government, the road traffic act (1988) (sections 39 and 40) stipulates the powers of the Secretary of State for Transport and Local Authorities, in their capacity as Highway Authorities, to 'provide road safety information ..... to promote road safety'. In addition, when the STATS19 survey was initially set up in 1948, the then Home Secretary required the police service to collect data on road injury accidents and submit it to the Department for Transport [Home Office Circular No 263/1948 '*Reports of Road Accidents involving death or personal injury*']. That requirement remains in force.

The need for statistical information to support the work of Highway Authorities, and also facilitate targeted police road safety enforcement and education, is recognised by the Association of Chief Police Officers (ACPO) to be an obligation upon police services. It is funded implicitly in the police budgeting process usually as part of 'traffic management and general administration' duties, and not under a specific budget entry. The collection costs to the police are significant (**estimated at nearly £5 million**) and an essential element of the review is to ensure that the policy needs of road accident data can be justified in terms of their collection and processing costs, not only to police services, but also to local authorities. The aim is to maintain an agreed common national framework for collecting STATS19 data which services user needs subject to the resource limitations which constrain collection and processing. **Section 8** examines this issue in greater detail.

## 2.3 Management of the STATS19 system

The accuracy and credibility of the STATS19 collection process, and the resulting national statistics, depends upon close co-operation between central government, local government and police forces. The STATS19 collection system is jointly managed and owned by the Standing Committee on Road Accident Statistics (SCRAS) comprised of representation from police services, local authorities, and central government. This committee effectively provided the managerial advice for the 2002/3 review. The Association of Chief Police Officers (ACPO), and ACPO(S) in Scotland, supports the regular review process and the necessity of maintaining a national reporting standard embodied in the STATS19 collection system, and they decide upon and protect the police obligation to this voluntary agreement within SCRAS.

## 2.4 Policy backdrop.

The government's road safety strategy document 'Tomorrows roads - Safer for everyone' sets out casualty reduction targets for 2010. These specify a 40% reduction in deaths and serious injuries for all road users, compared with the average for 1994-1998, and similarly a reduction of 50% in deaths and serious injuries for children. There is also a reduction target of 10% in the slight injury casualty rate per 100 million vehicle kilometres. Monitoring progress towards announced targets requires credible statistics to judge performance and imposes a minimum quality requirement upon the collection and processing of STATS19 data. The accident details which underlie the tally of injury road accidents, and their resulting casualties, provide the means to focus policy on effective reduction measures and these impose additional quality requirements. The issue of the quality of reporting is examined in greater detail in **section 10** of this report.

Police services face competing priorities in the allocation of their scarce resource. The National Policing Plan focuses police priorities upon crime reduction measures but recognises their role in traffic policing and casualty reduction, and the challenge for police services in the narrow area of road accident data collection is to increase the efficiency of collection and reduce the amount of police time devoted to this activity. To this extent, recommendations from Her Majesty's Inspectorate of Constabulary to rationalise police reporting processes and reduce police bureaucracy provide an important backdrop to planned changes to the data collection process, and are described in greater detail in this review report in **sections 8.3 and 8.4 (Part 1)**.

The competing demands of meeting user requirements and reducing the costs of the police provision of STATS19 data set the scene for the review, and are the key forces which come in to play in the need to maintain a national harmonised framework for the voluntary collection of STATS19 personal injury road accident data.

## 2.5 Review process .

The review was conducted by a working group formed of SCRAS members which reported back to the main SCRAS committee for final agreement. In this way SCRAS took the final operational decision concerning changes to the STATS19 system and what the coverage of the collection system should be.

There were some specific issues which were handled by smaller sub-groups of the working group but ratification was still organised through the main SCRAS committee. Professor Richard Allsop from the Centre for Transport Studies at University College London provided independent assessment of the review process and contribution to the development of review recommendations. Professor Allsop also produced the report in **Part 2** concerning the review of government publications of road accident data and related accessibility issues.

## 2.6. List of recommendations

After an extensive consultation exercise it was agreed that there should be a net increase in the information collected in injury road accidents (the STATS19 requirement) resulting from an addition of new variables. Two variables were dropped. It was also agreed to develop more efficient and harmonised collection practices for the STATS19 requirement and to also reduce the reporting requirement for injury accidents reported by the public at police stations.

A List of Recommendations for changes to STATS19 data collection is given below (a detailed coding specification and definitions can be found in STATS20 on the website at [http://www.dft.gov.uk/stellent/groups/dft\\_transstats/documents/page/dft\\_transstats\\_032188.pdf](http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_032188.pdf))

- **RECOMMENDATION 1: Journey Purpose**

Include a new variable (2.29) in the vehicle record, and a new variable (3.19) in the casualty record. The new vehicle variable will provide information about drivers and riders involved in injury accidents when they are at work. The new casualty variable will provide information about pedestrians injured when they are readily identifiable as being 'at work on the road' (but not those pedestrians injured on the road when they are making trips between different work places – which are less readily identifiable for the reporting police officer.)

The new variables for 'journey purpose' will not include injured occupants of vehicles because of police concerns about the potential difficulty of conducting separate interviews. This will strike a balance between police concerns about the practicalities and consequent burden of collecting this information, and the need to respond to the recommendations of the report to the Health and Safety Commission by the Work – Related Road Safety Task Group (**The Dykes Report**).

- **RECOMMENDATION 2 : Foreign Vehicles**

Include a new variable (2.28) 'Foreign Registered Vehicle' as a specific variable for collecting information about foreign registered vehicles involved in injury accidents on GB roads. The Vehicle Registration Mark (VRM) variable (2.26) should be retained, but the special codes for this variable should be removed and then modified and transferred to the new variable 2.28.

- **RECOMMENDATION 3 : Ethnic Code**

This should not be included in the STATS19 requirement. It should be considered as part of the project to develop a national report form, supported by software for data entry, which would impose standardisation of coding even for those variables not collected as part of the national STATS19 requirement. (see section 8.3 part 1)

- **RECOMMENDATION 4 Changes to Existing STATS19 Variables**

Include agreed modifications to the coding specification of STATS19 variables.

**1.14 Road Type**

Include 'Slip Roads'. Simplify 'Dual Carriageway' and 'Single Carriageway' codes

**1.17 Junction Control**

Merge the current codes 4 (Give way sign or markings) and 5 (Uncontrolled) because it was felt that the distinction between the two was unreliable

**1.20b Pedestrian Crossing - Physical Facilities**

Change code for "Footbridge or subway" to allow code 9 to be used for "Unknown" on Self Reported form

**1.23 Road Surface Condition**

Move 'Oil or Diesel' and 'Mud' to variable 1.24

### **1.24 Special Conditions at Site**

'Oil or Diesel' and 'Mud' transferred from variable 1.23

### **1.25 Carriageway Hazards**

Remove code for 'Dogs' and include separate codes for 'Animals (excluding ridden horses)' and 'Pedestrians not injured'

### **1.26 Place Accident Reported**

Separate accidents reported to a police officer 'over the counter' from those reported using a self completion form

### **2.5 Type of Vehicle**

'Private hire car' should now be included with 'taxis' as code 08. In London where black cabs are separately identifiable, the practice in London could be to keep code 08 for 'taxis' and code 07 for 'private hire cars' and then to combine them for submission to DfT as code 08.

Engine size banding for motorcycles should be adopted and the upper band should be set at 500cc in line with comments from policy branches and the motorcycle industry.

### **2.8 Vehicle Movement Compass Point**

Simplify the coding for 'Parked'.

### **2.9a Vehicle Location at Time of Accident – Road**

Remove code for 'minor road' and transfer codes 1 – 3 to variable 2.10

### **2.10 Junction Location of Vehicle at First Impact**

Incorporate codes 1 – 3 from 2.9a and modify with current codes to clarify vehicle location at 'mid-junction'. Include specific codes for Roundabouts

### **2.12 Hit Object in Carriageway**

Include code for 'Animal (excluding ridden horse)' and merge 'Parked vehicle' codes

### **2.26 Vehicle Registration Mark**

Remove the special codes

### **3.10 Pedestrian Location**

Change coding for "Not a pedestrian" from "00" to BLANK. Reporting officers will no longer need to allocate a code for non-pedestrian accidents

### **3.11 Pedestrian Movement**

Change coding for "Not a pedestrian" from "0" to BLANK. Reporting officers will no longer need to allocate a code for non-pedestrian accidents

- **RECOMMENDATION 5 : Clarification of Existing STATS19 Codes**

Include agreed clarification to the descriptions of variables and codes in the STATS19 requirement

### **1.20a Pedestrian Crossing – Human Control**

Re-label code 0 as 'None within 50 metres'

### **1.24 Special Conditions at Site**

Re-label code 4 'Roadworks' and modify STATS20 to apply to any accident within coned area

### **1.26 Place Accident Reported**

Re-label variable and codes

### **2.7 Manoeuvres**

Re-label codes 04 and 05

### **2.9b Vehicle Location at Time of Accident – Restricted Lane / Away From Main Carriageway**

Re-label code 5 to include 'shared use of footway' and modify STATS20 note E so that 'shared access' is changed to 'shared use'

- **RECOMMENDATION 6 : STATS19 Variables to be Removed**

### **2.18 Part(s) Damaged**

It was agreed that this variable should be removed.

### **2.9a Vehicle Location at the time of Accident – Road**

It was agreed that this variable should be removed following the implementation of recommendation 4 - Variable 2.9a

- **RECOMMENDATION 7**

It was agreed that contributory factors to injury road accidents would be included in the STATS19 requirement and would be implemented on 1 January 2005. **(see section 7 part 1)**

- **RECOMMENDATION 8**

It was agreed that the free text fields for 'Accident Location' and 'Accident Description' should not be added to the STATS19 requirement. In line with ethnic codes **(recommendation 3)** they should be considered as part of the need to develop a national reporting form in which collection would be standardised whether variables were part of the STATS19 requirement or not.

- **RECOMMENDATION 9**

It was agreed with ACPO and ACPO(s) that the police should continue to take reports of injury accidents reported by drivers or riders up to 30 days after the occurrence of the accident to maintain this longstanding STATS19 reporting requirement. **(see section 8.2 part 1)**

- **RECOMMENDATION 10**

Following ACPO guidance, police officers should reclassify 'damage' only' accidents to slight injury accidents only when it can be demonstrated to the reporting official that an injury resulted at the time of the accident. **(see section 8.2)**

- **RECOMMENDATION 11**

Retain the long standing casualty severity definition of 'fatal', 'serious injury' and 'slight injury'. **(see section 11)**

- **RECOMMENDATION 12**

The consultation process revealed mixed views about whether data collection and reporting should be organised on a calendar or financial year basis. The working group decided to retain calendar year reporting. Consequently, calendar year will continue to be the basis for published national road accident statistics **(see section 18 part 2)**

- **RECOMMENDATION 13**

The definition of 'school' should include pre-school play groups in both the definitions underlying the new journey purpose variable 2.29 'Journey purpose of Driver/Rider' and the existing variable 3.13 'School Pupil Journey'.

- **RECOMMENDATION 14**

It was agreed at the SCRAS meeting of 17 October 2002 that STATS19 changes should be implemented on 1 January 2005 rather than 1 January 2004 in recognition of the delayed conclusion to the review required to accommodate an additional research project into the proposed national contributory factors collection system **(see section 7 part 1)**.

## **POST REVIEW DEVELOPMENTS**

- **RECOMMENDATION 15**

Produce a National Report Form for use by 1 January 2005. The software versions of the paper form would probably follow at a later stage and there would be a need to trial these innovations with some police forces. **(see section 8.3)**

- **RECOMMENDATION 16**

Produce a self-completion form for use by 1 January 2005 as part of the project to develop a national report form. **(see section 8.4)**

- **RECOMMENDATION 17**

It was agreed by SCRAS that the self completion form should allow the use of additional "Unknown" codes **(see section 8.4)**.

- **RECOMMENDATION 18**

The research project to develop a national report form supported by software for data entry, in addition to considering standardised coding for 'ethnic codes' and 'free text fields', should also consider the inclusion of 'driving licence number'. A computerised version of the form would be able to automatically transfer 'driving licence number' (if available) from the section in the form relating to operational police reporting requirements to the section in the form relating to the statistical STATS19 requirement. **(see section 8.3)**

- **RECOMMENDATION 19**

In pursuance of the objective of ensuring that where data are shared without the explicit consent of the individual, there should be openness and transparency in the process of balancing between the rights of individuals and wider public interest, the Department should establish a framework for the exchange of personal data and publish its policy on such data exchange (**see section 13**).

- **RECOMMENDATION 20**

Produce new definitions (for inclusion in the STATS20 document which sets out the detailed definitions for the variables collected) relating to variables 1.14 'Road Type', 1.16 'Junction Detail', and the modified variable 2.10 'Junction location of vehicle at first impact', in order to clarify the coding requirement of these road related variables following the coding changes agreed for variables 2.10 and 2.9a.

- **RECOMMENDATION 21**

Police reported STATS19 data should remain as the base for establishing the level of personal injury road accidents and their consequent casualties on roads in Great Britain and the monitoring of government casualty reduction targets. However, greater prominence in official publications should be given to the implications of under-reporting for assessing the accident and casualty toll. (**see Part 2, and sections 10 and 11**)

- **RECOMMENDATION 22**

Establish a joint initiative with the Department of Health (preferably using SCRAS) to determine the limits and possibilities for;

- Developing a national database of road accident casualties treated in or admitted to hospital
- Matching STATS19 road accident records with hospital records.

This will enable SCRAS as a whole to contribute to a potentially important development in data analysis and quality assessment of police reported data. (**see sections 10, 11 and 12**)

- **RECOMMENDATION 23**

There is a need to increase the awareness of reporting police officers (particularly non-traffic officers) of the need for road accident statistics to support policy to improve road safety. This could help the quality of completion of the STATS19 requirement. There is also a need to maintain regular and programmed contact with local processing authorities and to provide some form of training to reporting officers about how to complete a STATS19 'return'. This will become increasingly urgent when contributory factors become part of the requirement, and also in the longer term when an electronic 'national report form' becomes an option for collecting the STATS19 requirement.

- **RECOMMENDATION 24**

The post review working programme for SCRAS should include a commitment to assess the benefits of collecting road accident information coded by accident type.

- **RECOMMENDATION 25**

The Adaptation of present procedures for publication which would require few extra resources [the full list is given in **part 2 : section 22** but includes recommendations that that the main annual series of printed publications should be continued and should relate to calendar years.

- **RECOMMENDATION 26**

**Changes requiring extra resources only initially - see part 2 : section 22.2**

Eighteen detailed recommendations are made to 1) improve the coverage and presentation of national road accident and related statistics and 2) to extend access to national statistics and also individual records by exploiting web technology and other service providers. These include a recommendation that note concerning coverage of the data, levels of reporting should be included in an appropriately prominent place. The results of the collection of data on contributory factors should be reported. The practicability of estimating the proportions of A-road vehicle-km travelled on single- and dual-carriageways by vehicle-type and by urban and rural road be investigated in order to better assess risk. The arrangements for access to the data on accidents for research should be reviewed; time-series of tables from the annual publications be made available via the web.

- **RECOMMENDATION 27**

**Changes requiring appreciable ongoing resources - see part 2 : section 22.3**

Five recommendations are made to develop data and information provision to users which include the incorporation of the new data to be collected into the publications; the introduction of an annual publication of data for English local authorities (tables for local authorities in Scotland and Wales are already included in the publications of the Scottish Executive and Welsh Assembly); produce or commission policy-oriented leaflets when they will promote the implementation of the road safety strategy; review the suggestion of a reduced road accident dataset accessible on the web for use in schools;

**2.7 In response to the recommendations above the following action is proposed :**

Proposed Action	Timing
<b>Recommendations 1, 2, 3, 7, and 14 Collection of new variables</b>	
New questions on 'Journey Purpose', 'Foreign Vehicles' and 'contributory factors' were added to the STATS19 requirement	Implemented 2005
Variables for 'Ethnic Code' and free text fields for 'Accident Location' and 'Accident Description' have not been added to STATS19 but are included in the police evidence section of the National police form	Implemented 2005
<b>Recommendation 4, 14 and 20 Changes to Existing STATS19 Variables:</b> Modifications to the coding specification of STATS19 variables were made.	Implemented 2005
<b>Recommendation 5 and 14 Clarification of Existing STATS19 Codes :</b> The wording of the questions was changed to clarify the requirement	Implemented 2005
<b>Recommendation 6 and 14 STATS19 Variables to be Removed:</b> The variable 'Part(s) Damaged' was removed and the variable '2.9a Vehicle Location at the time of Accident – Road' was removed following the implementation of recommendation 4 - Variable 2.9a	Implemented 2005
<b>Recommendations 9 and 10</b> It was agreed that the police should continue to take reports of injury accidents reported by drivers or riders up	



Proposed Action	Timing
to 30 days after the occurrence of the accident to maintain this longstanding STATS19 reporting requirement and that police officers should reclassify 'damage' only' accidents to slight injury accidents only when it can be demonstrated to the reporting official that an injury resulted at the time of the accident.	
<b>Recommendations 11 and 13 clarification of definitions:</b> The long standing definitions of 'fatal', 'serious injury and 'slight injury will remain unchanged. The definition of 'school' for both the new journey purpose variable [number 2.29] and the existing question about school pupil journey [number 3.13] should include pre-school play groups.	Implemented 2005
<b>Recommendations 15 and 23:</b> A National Report Form was produced and a website was set up to make reporting officers aware of the importance of the data and to help them in completing the form.	Implemented 2005
<b>Recommendations 16 and 17:</b> A self-completion form has been designed and is being tested.	There are problems with designing a form which can be easily completed by the public this is not likely to be implemented until 2007.
<b>Recommendation 18:</b> DfT and the Police Technology Organisation are developing a software for automatic data entry of road accident data.	The project is expected to be completed in 2007/8
<b>Recommendation 19:</b> DfT have developed a policy of access to their copy of the STATS19 data.	
<b>Recommendation 22:</b> DfT are involved in research to match the STATS19 record with the Hospital Episodes data held by Department of Health. If this is successful, then a joint initiative may be considered.	Initial research due for completion in 2006.
<b>Recommendation 24:</b> SCRAS has set up a working group to assess the benefits of collecting road accident information coded by accident type for consideration in the next review	Ongoing for next review
<b>Recommendations 12, 21, 25, 26 and 27 publication and alterations to publications</b>	
<b>Road Casualties Great Britain (RCGB - prior to 2002 Road Accidents Great Britain (RAGB))</b> To continue to produce an annual paper publication relating to calendar years with the following enhancements	
inclusion of an article on existing contributory factors data	Article included in RCGB 2004.
improved cross referencing between Contents and Index to tables	To be introduced for RCGB 2005
inclusion of note on data coverage and levels of reporting	A note is placed in both the preface and the Notes section of RCGB. When current research into under-reporting is completed the results will be shown in RCGB.

Proposed Action	Timing
extending inclusion of matching time series of exposure data from road traffic data and National Travel Survey	Where feasible matching time series of traffic data are already given in tables. Subject to resources, we will investigate the feasibility of introducing further relevant exposure data for RCGB 2006
inclusion of Road Traffic estimates of the proportion of A-road vehicle-km travelled on single and dual carriageways by vehicle type and by urban and rural road	This is not possible at the moment but will be kept under review
new tables to include data on contributory factor data to be collected from January 2005	The new contributory factor data will be included in a standard article in RCGB 2005. Further analysis may be produced from time to time in a second part of the article picking up particular issues using the data
<p><b>Scotland</b></p> <ul style="list-style-type: none"> <li>- Include traffic estimates by LA in "Road Accidents Scotland" volume (RAS)</li> <li>- With LGRAS consider whether age bands used in "RAS" could be aligned with those used in "Road Casualties Great Britain: Annual Report"</li> <li>- Include accident and casualty data by Police Force in "Key Road Accident Statistics" bulletin</li> </ul>	<ul style="list-style-type: none"> <li>- Implemented in 2003</li> <li>- Table 24 of RAS revised accordingly in 2003</li> <li>- implemented in 2004</li> </ul>
<p><b>Road Accident Wales (RAW)</b></p> <ul style="list-style-type: none"> <li>- Include traffic estimates by LA</li> </ul>	Implemented. Table 12.1 'Road Casualties: Wales'
<p><b>Regional Transport Statistics</b></p> <p>New publication includes time series for key road safety series by Government Office region, Metropolitan County, Country</p>	Annual publication from November 2001
<p><b>Web developments</b></p> <p>Development of additional web only tables to provide local authority (LA) detail, time series or additional analyses which it is not practical to include in annual paper publication</p>	<p>There were objections from users to the removal of all English local authority tables from the paper publication so one is to be retained and expanded to give details of unitary authorities in metropolitan areas. However, in addition, more detailed English local authority tables were made available on the DfT website in January 2005 and these will be updated annually.</p> <p>Time series based on key series in RCGB tables will be made available on web by 2007</p> <p>Some Scottish series, for 1981 onwards, including some for Scottish local authorities, were made available on the SE website from 2004</p>

Proposed Action	Timing
<p>Improve access to data in annual publications on DfT website by providing tables as excel spreadsheets</p>	<p>Excel version of tables available from RSGB 2004 onwards.</p> <p>Excel versions of Scottish tables available from 2003, and earlier years.</p>
<p>Develop web links between the publications for GB, Scotland and Wales and links from the national road accident data should have links to websites containing other relevant data</p>	<p>It is not proposed to take this forward at the moment but position will be reviewed when future developments to the websites are planned</p>
<p>Development of a reduced road accident database accessible on the web for use in schools</p>	<p>The Department will not be taking this forward.</p>
<p><b><i>Improving enquiry service and users access to data</i></b></p> <p>Review arrangements for access to data held at UK Data Archive and consider providing on line access to data at individual level on DfT site</p> <p>DfT has establish single telephone contact point and e-mail address for national road accident statistics</p>	<p>UK Data Archive arrangements subject to wider cross government review. Consideration being given to making database available more widely subject to National Statistics protocols , data protection and confidentiality restrictions</p> <p><a href="mailto:Roadacc.stats@df.gov.uk">Roadacc.stats@df.gov.uk</a> (0) 20 7 944 3078</p>

## **PART 1**

### **3. INTRODUCTION AND BACKGROUND TO THE REVIEW PROCESS**

Personal injury road accident statistics were first collected in 1909. The modern 'STATS19' collection system was established in 1949 and the current collection system was implemented in 1979 following a wide-ranging review. Road accident statistics are essential for informing and monitoring road safety policy at local, national, and international level. Locally they have a long established application to support remedial engineering work on public roads. At both a local and national level they are essential for steering road safety strategy and underpinning targeted casualty reduction. Within the EU they contribute, along with road accident data from other Member States, to European road safety initiatives and the sharing of best practice guidance.

Individual police forces and local authorities require road accident statistics to support their own road safety policy programmes. The collection process and data collected vary in local authority and police force areas, reflecting different local road safety requirements and circumstances. However, each local area is required to report the same set of accident records for national purposes and to transmit them to central government. These are popularly known as STATS19 records, named after the code number of the 1949 collection form

In England, within each local area, STATS19 data are collated by a central unit referred to as a Local Processing Authority (LPA) which can be managed directly either by the police or local authority, or be sub-contracted to a private consultancy. In Scotland and in Wales the Scottish Executive (SE) and the National Assembly for Wales (NAW) act as the LPA for the Department for Transport (DfT). There are 56 LPAs in Great Britain of which just under half are managed by local police authorities and the rest by local authorities

The STATS19 report form consists of an accident record, a vehicle record to be completed for each involved vehicle and a casualty record for each casualty arising from the injury accident. In 2002, local authorities and police forces collected, coded, validated and reported 220,000 accident records, 408,000 vehicle records and 302,000 casualty records for central government.

The data collected by the police represent the official record for measuring the annual number of accidents and consequent casualties on the public road network in Great Britain. They also provide details concerning the accident, and both casualty and vehicle involvement, based upon about 50 items of codable information. This is the basis for assessing the social cost and health problem of injury road accidents on British roads, which is significant and places a considerable burden upon health resources. It has been estimated (1997) that out of £1 billion annual public expenditure on road safety roughly half is accounted for by Health service provision of ambulance and hospital services. Another way of looking at the problem is that in 2002 the total cost benefit value of preventing injury road accidents amounted to £17.8 billion.

However the data reported to and by the police which underpin the public record are not perfect. It is well known that under-reporting to and by the police is significant, although fatalities are almost completely reported according to the STATS19 requirement. Studies show that there are about as twice as many casualties in road accidents as there are reported to and by the police, and under-reporting for slightly injured vulnerable road users (especially children) is very much higher. There are many reasons for under-reporting and, to an extent, they reflect the willingness of the public to report accidents to the police and the capacity of the police to complete a report for those injured in a road accident as defined by

the STATS19 reporting requirement. This issue is developed in greater detail in **sections 11 and 12** of this part of the report.

#### **4. CONSULTATION**

An extensive consultation exercise was carried out between July and September 2001. A project definition paper describing the scope of the review and a simple questionnaire were sent to over 1000 consultees by DfT. These are given in Annexes A and B respectively. The questionnaire was designed to gather ideas for improving the STATS19 system and its coverage, as well as asking for ideas about how to improve the presentation of, and access to, published national statistics. Each Chief Constable was also sent a copy for information. In addition, members of the review working group organised the mailing of consultation documents to their membership. The target consultation group was all known organisations involved in the collection and processing of STATS19 data, policy users in central and local government and the police services, road safety organisations and research consultancies, and regular users of national statistics derived from STATS19 data records. A copy of the consultation document was also placed on the DfT and ONS web-sites for general public participation. These documents are contained for examination in Annexes A, B and C

About 10% of consultees contacted by DfT made a formal response [listed at Annex D]. In addition many less formal telephone calls were received to discuss developments and find out information. Apart from the very many detailed comments received, a broad picture rapidly emerged from this consultee group that:-

- STATS19 data and published national statistics were used on a regular basis throughout the year
- The STATS 19 data source was essential for their work
- There was not an alternative source of data which could fulfil their user requirement.

#### **5. THE REVIEW WORKING GROUP**

The core representation of the review working group was :

##### **Police representatives**

Chief Superintendent J Moore	Association of Chief Police Officers (England, Wales)
Inspector G Dick	Association of Chief Police Officers (Scotland)

##### **Local Authority representatives**

Mr J Devenport	London Local Authorities (including TFL street management)
Mr A Duff	Convention of Scottish Local Authorities
Mr D Sherborne	Northern Local Authorities
Mr J Shortland	Midlands, East Anglia and Southern Local Authorities
Mr A Rookes	Welsh Local Authorities

##### **Devolved Administrations**

Mrs S Demery	National Assembly for Wales
Mr F Dixon	Scottish Executive

## DfT

Mr P Wilding  
Mrs V Davies  
Mr D Wilson  
Mr Anil Bhagat

Review Project Officer  
Statistician : Road Accident Statistics  
Transport Statistics Roads 5  
Transport Statistics Roads 5

## Independent Assessor

Professor Richard Allsop

Centre for Transport Studies (UCL)

The task of the group, starting with the consultation material, was to filter the many suggestions for change to the STATS19 system and deliver recommendations, agreed by ACPO and ACPO(S), for ratification by SCRAS in its role as final arbiter. The first working group meeting in November 2001 considered all the suggestions for change summarised in to one document, and the initial decisions of the working group were recorded on that summary document. Following this meeting options were drawn up for the coding of variables which the group thought could be considered for inclusion into the STATS19 requirement.

The working group met on five other occasions to work on the proposals. The record of each meeting shows the progression of the filtering process. The record of the 5<sup>th</sup> working group meeting sets out those recommendations which, at that stage, were finally agreed by the group and ACPO, and subsequently presented to SCRAS for ratification. These recommendations were then presented to police and local authorities at a series of regional meetings. Following these meetings, a number of changes to the recommendations (particularly to the contributory factors) were subsequently agreed by SCRAS. The main changes agreed are set out in the list of recommendations in **section 2.6**.

In the course of the working groups some proposals were rejected and the reasons for rejection were recorded. The following proposals, in particular, were relatively strongly supported by consultees but eventually rejected by the working group:

- **Air bags and safety restraints**

A variable for 'seat belt usage' was removed from the STATS19 requirement following the 1992 review because of concerns about the quality of reporting. However there has always been a strong lobby for the re-instatement of this variable, and the consultation response to the 2002 review was no exception. The view of the review working group was that this variable should not be re-instated because of concerns about data quality, and also the difficulty of defining simple rules for the selection of codes for the various categories of safety restraint and combinations of use with airbag deployment.

- **School children casualties 'after having alighted from a school bus'**

Although STATS19 includes variable 3.13 'school pupil casualty' to record school pupil casualties on a journey to or from school it was suggested in the consultation process that there was a need for an additional variable to record the involvement of buses in the accident circumstances relating to school children casualties. The issue of child casualties involved in bus related accidents en-route to and from school was of particular interest in Scotland where the Scottish Executive had commissioned research into the significance of the problem. However the working group decided not to include coding in

STATS19 to collect this information because, among other concerns, it felt that it could create reporting problems for the police in determining when a school child was a recently alighted bus passenger or had become a pedestrian, and that accident descriptions held locally, and not reported for STATS19 purposes, would provide the necessary details.

- **Driving licence number**

The driving licence number would provide a matching key with medical and driver records held at DVLA. If available for matching STATS19 data with DVLA medical records, it could provide a valuable means for assessing the relative accident involvement of drivers passed medically fit to drive, and hence the effectiveness of decisions concerning medical fitness to drive. Matching with records on the DVLA Driver Improvement Scheme database would provide a means for assessing the effectiveness of that scheme.

At an early stage the working group rejected this proposal because of police concerns about the burden of provision of this information for statistical purposes, although it is required for operational police reports of accidents. An additional problem for the reporting process is that drivers are not required to carry their driving licence and it can take up to 21 days for drivers to produce their licence by which time the STATS19 report has been submitted and cleared. The Chairmen of the Secretary of State's Honorary Medical Panels on Fitness to Drive, formally responded to express their concern that omission would mean that there would be no means of auditing, using accident data, whether medical standards are set for the most relevant conditions, and at the right level of impairment. They requested that the review continue to press for the inclusion of driving licence number.

However, at a later stage (**see section 8.3**), it was agreed that a national report form, supported by data entry software, should be developed for the police collection of road accident data required for police operational purposes, for local data requirements, and for the STATS19 requirement. The driving licence number is taken for operational purposes in injury accidents and, in principle, could be automatically transferred to the STATS19 statistical requirement when a computerised national form becomes available. The research project to develop a national report form should consider this option for including the driving licence number in the STATS19 requirement.

- **Inclusion of physical traffic calming features**

The detail and complexity of physical traffic calming features on public roads do not provide an option to include a simple coding scheme within STATS19 to satisfactorily record them without over - burdening the reporting police officer. It was felt that the most efficient way to proceed was for local highway authorities to map traffic calming features on to the geographical information system component of their local database as part of their road infrastructure inventory.

- **Inclusion of information on whether a casualty was admitted to hospital**

It would not be possible for the police to collect this information since data protection considerations may lead hospitals to refuse to provide it.

- **Inclusion of 'accident' and 'location' text information**

These items have been put forward for consideration in the development of the national form.

- **Changing terminology to replace the term 'Accident' with 'Collision'**

This item has also been put forward for consideration in the development of the national form.

And interestingly,

- **Make no changes to the coverage of the STATS19 collection system**

## 6. COSTS

### RUNNING COSTS

#### Central Government Annual Running Costs (Total avoidable costs if STATS19 data were not collected)

<b>DfT</b>	<b>£ 289,000</b>
<b>National Assembly for Wales</b> (Liaison, Notional computing costs (including implementation and other costs), database management, publications, analysis and requests)	<b>£ 70,000</b>
<b>Scottish Executive</b> (Liaison with data suppliers, computing, database management, analysis work, producing publications, and answering requests.	<b>£ 55,000</b>
<b>English Local Authorities</b>	<b>£ 990,000</b>
<b>Welsh Local Authorities</b>	<b>£ 65,000</b>
<b>Scottish Local Authorities</b>	<b>£ 40,000</b>
<b>Police</b>	<b>£4,938,000</b>

### IMPLEMENTATION COSTS OF STATS19 CHANGES

<b>DfT</b>	<b>£ 30,000</b>
<b>Scottish Executive</b>	<b>£ 20,000</b>
<b>Welsh Local Authorities</b>	<b>£ 44,000</b>
<b>Scottish Local Authorities</b>	<b>£ 32,000</b>
<b>Police</b>	<b>£ 141,000</b>



## **STRATEGIC ISSUES AND IMPORTANT THEMES CONSIDERED IN THE REVIEW**

### **7. CONTRIBUTORY FACTORS**

#### **7.1 The 1997 Quinquennial Review**

The 1997 quinquennial review considered a proposal from ACPO, supported by the (then) DETR, to include a national collection system of contributory factors developed by the Transport Research Laboratory (TRL) into the national STATS19 reporting requirement. At the time, ACPO recommended that the TRL system should be implemented as best practice by all police forces to assist the effective deployment of police forces for carrying out enforcement duties. Road Safety division (DfT) supported this development in the belief that this would provide national analysis to underpin publicity campaigns and target research.

During the 1997 review it was clear that there were very different views (both within police forces and local authorities) concerning this proposal, although there was a very significant majority in support of harmonised national collection. The bone of contention was the structure and coverage of the national collection system proposed by TRL which, although searching for compromise, differed from local contributory collection systems which had been producing data for local authorities, in some cases, for many years.

It was agreed, following negotiation with the County Surveyors Society, that adoption of the TRL system could proceed on a voluntary basis but that it would not be a STATS19 requirement. Sixteen police forces adopted the harmonised national collection system of contributory factors designed by TRL and fifteen of these supplied the contributory factor data to DfT.

All collection systems designed to describe accident causation will inevitably be inadequate in the sense that it is impossible to offer a coding system which can adequately describe the great complexity of accident causation which can occur for different road accident types. All collection systems try to offer a solution that addresses the competing requirements of:

- simplicity to encourage reporting officers to make a report,
- comprehensive coverage of codable factors to allow an accurate description of different accident types, and
- flexibility in the structure of the coding frame to allow the description of accident causation for all the road users involved in the accident.

The relative importance of these requirements largely determines perceptions of what is a desirable approach to collect information about contributory factors.

The harmonised national collection system of contributory factors was proposed on the basis of simplicity in the way that it offers a 2 tier reporting structure, based around a primary failure of the road user (precipitating factor), and a secondary explanation (contributory factor) of why the failure took place. This offers a logical procedure to assist the reporting officer. The further simplification is that only one road user can be identified as the prime cause of the accident, and that (up to) four secondary contributory factors are attributable to explain the reasons for this failure. The pilot test conducted before the 1997 review suggested that this simple structure was sufficient to adequately describe most accidents.

#### **7.2 The results of the consultation in the 2002 Quality Review**

In the years following the 1997 review little progress was made in reconciling the diverse views about this system. The underlying problem remained that, over a long time period,

different approaches had been adopted locally for collecting contributory factors. Codable frameworks had been developed locally based either upon Grids, Lists, or Tiers of contributory factors, and in each of these systems the number of contributory factors in the coding frame, and the number required to be selected to describe the accident, varied considerably. The consultation exercise for the 2002/3 quality review once again revealed a wide range of divergent views concerning the appropriate way to collect such data, although there was general agreement that it would be valuable.

It was quickly apparent from the consultation response that what was intended as a simplification in the proposed TRL form was perceived as a complication by many users of local systems. The simplification of linking all the secondary contributory factors (up to four could be chosen) to the chosen (one) primary precipitating factor was seen as too limiting. Despite TRL assessments, based experiences in the trial of the system, that this coding pattern could cope with most accident configurations, problems were reported in a number of situations. For example, in a case where a pedestrian (especially an uninjured pedestrian) was identified as the primary precipitating failure but where additional driver failure (typically driving too fast) also contributed to the accident, the TRL coding frame could not adequately cover this eventuality. Detailed comments included :-

- It was pointed out that within any chosen system, the number of codable factors available for selection and the number allowable for selection, heavily influence the analysis of causation. In particular, a prime historic example of this problem manifested itself in estimates of the contribution of speed to road accidents which was shown to vary significantly between all the different forms of collection system. As far as the proposed national collection form was concerned it was felt that insufficient weight was given to the problem of speeding, and that an additional factor should be included for 'Inappropriate Speed' to supplement the existing factor for 'Excessive Speed'.
- Some police forces are concerned about having to attribute 'Blameworthiness' to a road user and, in particular, officers are concerned about having to defend their judgement in court. In some areas it is reported that there is a reluctance to complete a report because of this concern.
- The proposed national collection system asks the reporting officer to attach a 'degree of confidence' qualification to the selected secondary contributory factors. The choice is between 'definite', 'probable', and 'possible'. It was felt that it was difficult to distinguish 'probable' from 'possible' and that this could be dropped. It has been suggested that in view of the difficulties which may arise from having to attribute blame, that the choice could be narrowed to 'definite' and 'limited evidence'.
- There was a strong feeling in some police forces that trying to complete a contributory factor form, when the accident is reported after the event at a police station, is very time demanding and does not produce meaningful information. There have been suggestions that for these type of accidents (mostly slight accidents) that the form should not be completed.
- Some road safety organisations took exception to the fact that pedestrian failure (code 7) in the primary precipitating factor section is worded as 'entered carriageway without due care'. They maintain that legally a pedestrian is required to only take 'reasonable care for themselves'. Their view is that the current coding specification could over-estimate the 'blameworthiness' of pedestrians in road accidents.
- It was also pointed out that in some circumstances it was only possible to identify potential 'pedestrian failure' if the pedestrian was injured and reportable at the scene of

the accident. In some situations it was claimed that it would be very difficult to determine blame if an uninjured pedestrian, who in fact was responsible for the accident, left the scene of the accident and was unavailable for interview during the evidence collecting stage. It is not clear how any collection system would cope with this problem.

- There were general conflicting statements that the proposed national collection form was 'too simplistic', or 'too difficult'. It was also suggested that the collection form was not flexible enough because it only allowed for the identification of one blameworthy road user.

Following the response from the consultation exercise, Road Safety Division in DfT, decided that it was necessary to seek impartial advice on how the current TRL collection form, which was in use on a voluntary basis by some police forces, could be modified to meet the concerns expressed in the consultation. The work was carried out by the Transport Research Group (TRG) at Southampton University were chosen to undertake the research. Their report can be found on the DfT website at:

<http://www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/casualtiesgbar/stats20instructionsforthecom5094>

On the basis of the TRG report, SCRAS reached an agreement that contributory factors to injury road accidents should be included as part of the main STATS19 requirement. The structure and content of the codable framework, was developed further in discussions by SCRAS after regional consultations with representatives of the police and local authorities. The final version can be seen in the STATS20 document.

## **8. MAINTAINING A HARMONISED AND SUSTAINABLE NATIONAL REPORTING REQUIREMENT**

### **8.1 Public duty to report**

The 1998 Road Traffic Act (section 170), and subsequent amendments, set out the public duty to report 'damage only' and personal injury road accidents to the police. These are accidents which occur on the public highway as defined in section 192 of the 1988 act and on the public road as defined in the Roads (Scotland) Act 1984. Sections 261 and 262 of the Highway Code also describe the duties of the driver to report an injury accident. They merely require drivers/riders to report to the police within 24 hours if they are unable to exchange documents, (these reports only relate to the need for information to support insurance claims and establish criminal liability, and not the detailed statistical coding). There is no requirement on the public to report an injury accident, if those involved are able to exchange documents, even though they may still attend hospital for treatment.

The STATS 19 requirement for statistical information relating to a police report on a road accident differs in some respects to the requirement of the road traffic act. These differences, which mainly relate to the definition of public highway/road, the allowable reporting period for an injury road accident to the police, and the treatment of injury accidents involving cyclists, were set out in the 1997 review. They are given in the definitional guidance to the STATS19 requirement in a document known as '**STATS20**'. An aid memoir '**Help save lives**', produced specifically for reporting police forces following the 1997 review, sets out these differences in a concise and simple manner, and copies are available from DfT (contact [roadacc.stats@dft.gsi.gov.uk](mailto:roadacc.stats@dft.gsi.gov.uk)).

### **8.2 Maintaining the STATS19 requirement**

The organisation behind the data collection for the STATS19 requirement is very diverse covering and involving 51 police forces in Great Britain. The processing organisation is just

as diverse involving 56 local processing authorities. About half of these are situated in police headquarters and the other half in local authority headquarters, or with their respective consultancies. Some police forces, which are not responsible for local processing, supply road accident forms to multiple local (authority) processing authorities in their area. In some police force areas, a contractor organises the processing of data for both police and local authority clients. Trying to maintain a common but voluntary reporting framework subject to the constraints of such organisational complexity is very difficult given that each individual police force is subject to varying local priorities; and the local authority side which also contributes to the processing of some of the data is subject to similar pressures. The solution to this intricate management problem has, for many years, been to empower SCRAS to maintain a common reporting standard and requirement which is acceptable to all parties.

During this review concerns were raised about reports of emerging divergence in collection procedures arising from local interpretation of the STATS19 requirement. There were two specific reports of diverging reporting practice, which could have significant implications for reporting-rates and target monitoring if adopted nationally, which were raised:

- The STATS19 (statistical) requirement is clear that if drivers/riders report an injury road accident to the police within 30 days of the occurrence of the accident then it should be admissible. Whereas, the Road Traffic Act and Highway code state that drivers/riders, should report to the police within 24 hours if they are unable to exchange documents, (these reports only relate to the need for information to support insurance claims and establish criminal liability, and not the detailed statistical coding). Although these separate reporting requirements overlap it is not always an easy task to satisfy both requirements simultaneously, and for reasons of operational expediency it is tempting to limit the allowable reporting period for STATS19 purposes to less than 30 days. There were reports that a few police forces were using either a 24hr or 48hr cut off period for accepting (STATS19) reports of a road accident. It is important to maintain the STATS19 definitional standard which is an allowable 30 day reporting period after the occurrence of the accident.
- It has also been suggested that many more drivers, once having reported a damage only accident to the police, are returning to reclassify the accident as an injury accident in the hope of establishing a 'full' compensation claim. Undoubtedly re-classification should be allowable in cases where there are genuine delayed injury effects from an accident. However, the police still have to address the problem of alleged and delayed injury claims because of the additional reporting burden it places them under. It is difficult to judge the veracity of drivers' statements that they had been injured after the event unless there are obvious physical signs or evidential statements of injury. Some police forces, in response to the increase in claims of slight injury in road accidents, have taken the line that re-classification is not admissible. The STATS19 requirement is that a period of 30 days is allowable for reporting an injury accident for statistical purposes and that re-classification within this period is admissible. ACPO have taken the view that when a road user wishes to reclassify a road accident formerly reported as a 'damage only' accident to a personal injury accident, then it is the responsibility of the road user to show that the injury was incurred at the time of the accident. If this is not forthcoming then the reporting police officer may decline to reclassify the accident.

### **8.3 Development of a National Report form**

There is little doubt that the police STATS19 collection process is under pressure from competing resource priorities and that action needs to be taken to safeguard the supply of STATS19 data. Discussions with the Home Office (HO) have made it clear that turning the STATS19 survey into a statutory survey is unlikely to resolve reporting problems and could have considerable disbenefits. This position was accepted by the SCRAS committee.

At a more global level, the Policing Bureaucracy Task Force of the Home Office recommended that, among other things, there is a need to rationalise police reporting processes to reduce bureaucracy. As a result, DfT and ACPO felt that the development of a "national" form for the police recording of accident details, together with data entry software, (for use on hand-held computers at the scene of the accident or terminals in police stations), could lead to considerable savings in police time. The national form could take the place of the many varied local collection forms and processes which had evolved over time to satisfy both national STATS19 and local road accident data requirements. It should seek to exploit those efficiencies to be derived from ergonomic design and a logical and guided reporting structure. The data entry software to support a national form should promote a more consistent reporting of STATS19 data and improve quality of reporting by including features such as on-line error trapping, on-line STATS20 guidance and automated pathways through the reporting requirement. Direct data entry should also reduce the need for administrative support, provided by police clerical support teams (eg Criminal Justice Units), for validating coding. A national form would also reduce the total costs and simplify the process of implementing updates resulting from review changes.

The aim would be to produce a form that would collect all the information needed (for Police and Local Authority purposes and for "STATS19"), and the associated software if possible, to be available for use from 1st January 2005. Police forces would be likely to use it, since it would be provided free and so they would save the costs of developing and changing their own forms and software. Or, they could use the new form and amend their existing software. The quality of the statistical data would be improved because it would be collected at the same time as the operational reporting details, rather than by completing a separate statistical form later, as sometimes happened. The software versions of the paper form would probably follow at a later stage and there would be a need to trial these innovations with some police forces.

#### **8.4 'Over the counter' reporting and the development of a Self Completion form**

As part of the drive to rationalise the police reporting process and reduce police bureaucracy, the Policing Bureaucracy Task Force proposed a form for the collection of information on damage only and slight injury accidents which could be completed by the road users themselves rather than police officers (hereafter referred to as a 'self completion form'). The intention was to divert the burden of completion from the police to drivers and riders. It was intended that ACPO would agree a protocol for the use of the self-completion form which would also seek to safeguard the needs of the STATS19 statistical reporting requirement. In particular, the impact of a self-completion form upon reporting rates is of particular concern for the monitoring of government targets for reducing the slight injury casualty rate. It is intended that a self-completion form should be made available for those police forces who did not want desk officers to take details over the counter. The form design will have to facilitate easy self-completion or it was likely to have a detrimental effect on reporting levels of accidents. It is proposed that the development of this form should be included as part of the project to develop a national report form. However, it was agreed that police staff would still have to code location details and would need to spend time to check completion details, and that either police or local authority staff would still have to add information such as grid co-ordinates based upon the free text descriptions of the location.

In addition to the need to reduce the burden on police officers of STATS19 taking details of personal injury road accidents 'over the counter' at police stations, there was also an issue about the quality of data reported. A sub-working group was convened to consider which of the STATS19 variables should be collected for accidents reported 'over the counter' and whether the remainder should either be eliminated, or retained with the option that if the information is difficult to obtain with a reasonable degree of precision then a 'not known'

option is available for completion. This latter option would allow the reporting officer some discretion in what is reportable and minimise the loss of potentially useful information. The reduced requirement is intended to minimise the reporting burden upon police forces but equally forces can still report all the STATS19 variables if they wish to do so.

## **9. ADDRESSING THE COSTS AND BURDEN OF DATA COLLECTION BORNE BY THE POLICE**

In response to user suggestions for expanding data collection, an over-riding concern relating to the supply of STATS19 data to government is the collection cost imposed upon the police. The official agreement from ACPO to the changes to the variables to be collected in the STATS19 requirement states this concern forcefully. In particular, the decision to proceed with the collection of new information about road accidents 'at work', which represents a departure from the normal procedures of reporting objective details associated with the accident and requires the police to conduct additional interviews, has been agreed on a partial collection basis to satisfy police concerns about reporting burden. This will limit collection to data readily available at the scene of the accident and subsequent investigation. The police will not agree to the burden of collecting data concerning vehicle passengers which would generate additional interviews.

The problem of police costs and reporting burden are implicitly recognised in the drive to rationalise reporting by developing a national reporting form (**see section 8.3**), and a self completion form to divert the reporting burden from the police to drivers and riders for 'damage only' and 'slight injury accidents' (**see section 8.4**). These proposals are also expected to improve the consistency and quality of STATS19 data in the long term.

## **10. FITNESS FOR PURPOSE**

It is often reported that the monitoring of Government targets for casualty reduction require road accident data to be reported accurately over time. This would seem obvious, but it is not quite that simple. The need for data to be 'fit for purpose' is often recited, but there is a need to define both 'fit' and 'purpose'. In principle it is possible that government targets could be monitored with inaccurate data as long as the inaccuracy (bias) was consistent over the time-span of the target period. Although there may be systematic bias in the estimated level of casualties, estimated percentage changes would be reliable indicators of change in the true level. On the other hand the monitoring of casualty reduction targets becomes problematic if it is reported inconsistently (see sections 11 and 12 below.).

Behind the debate about whether STATS19 data is 'fit for purpose' lie some important considerations and procedural constraints:-

- The coverage of the national STATS19 collection requirement is decided by the Standing Committee (SCRAS) which manages the national collection process. This is a process of compromise based upon what the police are willing to collect, and what SCRAS representatives (including the police) think are the relevant questions to ask to meet Government, Local Authority and Police policy requirements. SCRAS representatives were canvassed about their use of the STATS19 data established by the 1997 review. The conclusion was that every question was essential for the work represented by committee as a whole, although each member represented groups with different needs from the data.
- In any review there are always many proposals from users to include new variables in the STATS19 requirement, but remarkably few to exclude existing variables. A

substantial part of the review process is taken up by discussing what the STATS19 coverage should be, taking into account any reporting difficulties and consequent data inaccuracies for specific variables. The democratically arrived at recommendations for changes to the STATS19 process are put to SCRAS for ratification. It is SCRAS which formally decides what is 'fit for purpose'.

- However, once the coverage and specification of the STATS19 requirement has been decided there are no guarantees that reporting will not be problematic. There are circumstances where a reporting police officer may have difficulty in answering some questions. In most of these cases the usual view of SCRAS is that we should persist with the specific reporting requirement and make efforts to improve reporting. Elements of the STATS19 reporting requirement are not something which can be turned on and off like a tap. A voluntary system which is based on the reporting efforts of the very many local police forces and local authorities requires very considered adjustments.
- The official statistics which provide the basis for monitoring government casualty reduction targets are based upon STATS19 data reported by the police to local processing authorities, for onward transmission to government after it has been coded and validated. At a local level the STATS19 data, plus additional road accident data collected by the police for local purposes, provide the basis for road safety work by the local police force and local authority. However, road accident data supplied by the police, both for national and local purposes, persistently and significantly underestimate the total level of accidents and casualties in any reporting year. This is not a failing of the reporting system. It is a practical limitation to the reporting process which every national road accident police reporting system endures. The need is to encourage a higher level of reporting, and the richness of accident detail that accompanies it, within the resource limitations of those furnishing the data. Rationalising the police reporting process by developing a national standard reporting form, backed up by software for direct data entry, offers a way to improve the efficiency and consistency of reporting. The way to establish a better estimate of the level of accidents and their consequent casualties, without the accompanying accident detail but with potentially more injury detail, is to develop and exploit data records in hospitals. The possibilities for establishing a central record of road accident casualties admitted to, or treated in, hospitals, are greater than they used to be now that hospitals are allowed to claim back up to £10,000 from the insurance companies of liable drivers in road traffic accidents, and which would presumably require the need for a recording system. In Scotland, the Scottish Hospital In-Patients' System (SHIPS) has provided the means to compare police reported road accident casualties with 'hospitalised' road accident casualties for many years.
- Research has shown that police reported casualty data underestimate the total number of casualties, of all severities, by about half, but that reporting rates by the public to police services of slight injury accidents have been increasing in recent years fuelled by the prospect of compensation. Although nearly all fatalities are accounted for, subject to the STATS19 reporting requirement, many casualties are under-reported (especially slightly injured child pedestrians and cyclists). The constraints on the ability and capacity of the police service to fully report road accident data is not unique to the GB system. It is a fact of life for every national reporting system. The solution to the problem is to ensure that police services are aware of the definition and coverage of the STATS19 reporting requirement and that they have the capacity and resource to report this information and that the public are aware of the need to report accidents to the police.

## 11. SEVERITY OF INJURY

Casualty severity is reported according to a simple STATS19 definition of 'Fatal', 'Serious' and 'Slight' categories. These categories were defined in order to allow police officers to make a determination of severity at the scene of an accident. They are not the result of a medical diagnosis. The definition of the 'serious injury' category covers injuries from a life threatening trauma to minor concussion. The definition of the 'serious injury' category can cause problems both in the use and interpretation. Some police officers do not consider all the injury types included in the definition of 'serious injury' to be of a such a severe nature to merit the classification '*serious*'.

Another issue is that the broad definition of serious injury adopted in the UK makes it difficult to make international comparisons. Many comparable national collection systems only cover data on casualties admitted to hospital. While the broader coverage in the UK facilitates much work on road safety interventions, it means that we cannot make international comparisons on the basis of numbers of injured casualties.

In addition, it can be difficult to determine the severity of injury at the scene of an accident. Research has shown that police officers tend to underestimate the severity of injury in more cases than they over-estimate it. This contributes to issues of under-reporting.

It was suggested that the review should consider establishing a subset within the serious injury category of 'very serious' casualties. The 2010 government casualty reduction targets are based upon the current casualty definitions and require the ability to account within these definitions. The proposal to establish a subset of more serious injuries would not jeopardise the ability to monitor 2010 targets. However, a survey of police officers conducted by DfT's national police liaison officer revealed, on balance, that there were practical difficulties in attempting to establish whether seriously injured casualties were either 'hospitalised', or whether a paramedic attended the accident, both of which could be used as indicators of 'very serious injury'. In many cases 'hospitalisation' of the casualty would involve the practical burden of following up the post accident history of the casualty and was unacceptable to both ACPO and ACPO(s). It was thought that the attendance of a paramedic did not necessarily indicate that a very serious injury had occurred. The police view was that the current severity categories and definitions should be retained. Furthermore, police officers are not trained to assess injury, and narrowing severity categories to even more specific categories of injury could lead to further reporting complications.

Nevertheless, more detailed information on the injuries suffered by road casualties would help to develop remedial action and could refine estimates of the social cost of road accidents. A recent report by TRL (**see 'Linkage of Hospital Trauma data and Road Accident Data by J Broughton et. al)**) describes a data matching exercise between clinical injury information, for road casualties 'hospitalised' in 1994 to 1996 for 72 hours or more, from 163 English Hospitals subscribing to the Trauma Audit and Research Network (TARN), and STATS19 road casualty data. About 60% of the hospital sample was matched with STATS19 data using links such as age, sex and date of accident which allowed detailed clinical injury assessment of injury to be linked with detailed accident information. The analysis provides a valuable insight into the detailed injury specification of different types of road user in different types of severe accident in England. The development of the TARN network may assist the development of a database of road accident casualties treated or admitted to hospitals in England and Wales which would help in monitoring under-reporting on a more systematic basis



## 12. UNDER-REPORTING

The problem of under-reporting of injury road accidents and the consequent underestimation of the casualty toll and social cost of this major health problem on GB roads has been well documented in the past decade. Road safety organisations rightly point out that national statistics only represent those road accidents reported by the police to local processing authorities and that this should be made clearer in national road accident statistics publications.

The most recent and largest study concerning rates of under-reporting, based on a comparison of road accident casualties identified in a sample of large Accident and Emergency Departments with STATS19 casualty records, (reported in Road Accidents Great Britain 1996) estimated that:

- The number of seriously injured casualties recorded in national STATS19 casualty data should be increased by a factor of 2.76
- The number of slightly injured casualties recorded in national STATS19 casualty data should be increased by a factor of 1.70

to take into account that:

- About half the hospital sample was matched with STATS19 data
- About a fifth of reports by the public to the police were not subsequently recorded as STATS19 data
- Police reports were more likely to under-estimate than over-estimate injury severity.

These estimates of the under-reporting rates of national injury severity categories are similar to some smaller scale local studies done in the mid 1990's, and also confirm results from the Scottish Hospital In-Patients System (SHIPS) where matching with STATS19 data shows that twice as many casualties are hospitalised from road accidents than are recorded by the Scottish Police.

Although statistical comparison provides an indication of the incidence of under-reporting it should be noted that comparison of 'hospital' and police records does not strictly compare like with like. The Police STATS19 statistical requirement excludes some types of accident (e.g. accidents on private roads even though they are reportable for operational purposes according to the Road Traffic Act), but casualties in these accidents may present themselves to A and E Departments for treatment and subsequently be recorded in hospital data. Equally some minor casualties will be picked up in the STATS19 record but the casualty may choose not to seek medical treatment or be treated locally at a General Practice. However, it should also be remembered that there is no requirement on the public to report an injury accident if those involved are able to exchange documents even though they may still attend hospital for treatment. The supply of guidance to the police about the specification of reportable STATS19 accidents (which differs in some respects from the requirements of the Road Traffic Act) is essential to encourage a consistently reported national data set. The STATS 20 instructions for completing a STATS19 record seek to define and clarify the STATS19 reporting requirement but they are not always readily accessible to the reporting police officer. However plans to develop a national reporting form backed by data entry software which could also contain definitional guidance 'on-line' would make accessibility less of a problem.

The lack of a national database for road accident casualties treated in Accident and Emergency units or admitted to hospitals means that it is not possible to regularly (ie annually) provide a match with STATS19 data to assess the extent of under-reporting and the true social cost of road accidents. Sample based studies are still the best that can be achieved at the moment but their expense tends to make them prohibitive. STATS 19 data, based upon police reports, must continue to provide the basis for national accident and casualty levels, and the richness of accident, casualty and vehicle detail that comes with the record. However there is no reason why greater acknowledgement of under-reporting and under-estimation of social cost cannot be made in official publications.

At a local level, Transport for London (TfL) recently commissioned TRL/University College London to carry out a study to match STATS19 data with hospital accident and emergency data relating to three hospitals in London. The broad results indicate that the level of police under-reporting was lower than research based indications of the national average. In Outer London the police reporting rate was estimated at 70% and in Central London as a very high 87%. There is no doubt that there will be significant variations in reporting rates between police force areas for many reasons. There are other examples of local matching exercises that are planned or have already produced local estimates of under-reporting, but it is difficult to use these as a basis for estimating national rates of under-reporting. The consultation exercise revealed some interest in the possibilities for linking to hospital data at a local level. However the strongest arguments were made for developing an understanding of the possibilities for the national assessment of under-reporting to obtain a better appreciation of the public health problem resulting from road accidents.

### **13. DATA PROTECTION**

The current STATS19 requirement does not provide the Department with the name and address of riders/drivers or casualties but there is some information about people on the record. That information is directly relevant to specific road safety problems – for example on age, child pedestrians, young drivers, and elderly drivers pose different issues for those trying to improve road safety. The vehicle registration mark, full postcode for drivers/riders and casualties (2.27 and 3.18 respectively) and whether the driver took a roadside breath test and the result of that test are also collected. The vehicle registration mark (VRM) is used to obtain details such as make and model of vehicle from DVLA records for use in analyses, e.g. of the relative safety of different types of cars. The postcode produces information which allows the possibility to determine the area of residence of accident involved drivers and casualties and to link them with socio-economic indicators of the area, and also to determine the proximity of accident location to location of residence. The former is useful for assessing the link between social deprivation and road accident risk while the latter helps local authorities and police forces focus their safety campaigns and publicity in their local area. The "breath test" information is used in estimating the number of drink-drive accidents. Because of their sensitivity, the VRM, postcode and "breath test result" variables are excluded from the copy of the STATS19 data made available at the UK Data Archive.

It is an objective in government that better policies and services are delivered by most effective use and sharing of information between public bodies, while at the same time maintaining the commitment to enhancing privacy of individuals [Privacy and Data-sharing: The way forward for public services, a Performance and Innovation Unit Report, April 2002, Cabinet Office]. However the legal framework relating to privacy has been evolving rapidly over recent years and will lead to significant changes between the citizen and the state. Therefore, in pursuance of the objective of ensuring that where data are shared without the explicit consent of the individual, there should be openness and transparency in the process of balancing between the rights of individuals and wider public interest, the Department

should establish a framework for the exchange of data and publish its policy on such data exchange.

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## Part 2

### Review of Road Accident Statistics: Dissemination of and Access to the Data

#### 14. INTRODUCTION TO REVIEW OF DISSEMINATION

This part of the review is concerned with the coverage and presentation of national road accident statistics in government publications and the wider question of accessibility to available data.

In the context of the National Statistics Quality Assurance Programme it is also important to engage users of the road accident statistics in reviewing the dissemination of the data and access to them. For this purpose, the external Assessor to the Review, Professor Richard Allsop from the Centre for Transport Studies at University College London, was asked to chair a Working Group and draft this Part of the Report describing the outcome of its work.

The outcome comprises mainly a set of recommendations for action that the Working Group believes would be helpful to users and would be practicable to carry out if it were decided to allocate the necessary resources. It is for the responsible Departments to decide which of the recommendations to implement.

#### 15. THE REVIEW OF DISSEMINATION AND ACCESS

The Working Group responsible for reviewing dissemination of and access to the road accident statistics comprised:

Professor Richard Allsop (Chair)  
Valerie Davies (Road Safety Statistician, DfT)  
Sarah Demery (Statistician, NAW)  
Frank Dixon (Transport Statistician, SE)  
Pauline Masurel (Data Analyst, DfT)  
Peter Wilding (Review Project Officer, DfT)  
Chris Chantler (Secretariat to Theme Working Group, ONS)

The Working Group decided to seek the views of users primarily by means of a questionnaire which was mailed in hard copy to all lists of users or likely users known to the Group and mounted on the Review's website. This part of the Report is based mainly upon the Working Group's interpretation of the responses to the questionnaire in the light of its own knowledge of use made of the data, requests for access to the data, and the scope in technological terms for providing access to the data via the web, and on consultation with the UK Data Archive about use being made of the data by that route (<http://www.data-archive.ac.uk>). It was subsequently circulated in draft for comment to all respondents who gave addresses and all members of the Standing Committee on Road Accident Statistics, and was presented for discussion at an open meeting of the Transport Statistics Users Group. The resulting comments were taken into account in finalising this part of the Report.

A covering note to the questionnaire set out the broad aims of the review of dissemination and access as:

- To obtain indications of the level and frequency of use of the principal DfT, NAW and SE publications which contain road accident statistics.

- To receive and consider suggestions for modifications to existing publications which, by way of example, could include:-
  - Different analyses for specific road user groups or road accident types
  - Different use of graphics and tables
  - Changes in the balance between time-series and detailed analysis for the most recent year
  - Links to road accident statistics or research results in other publications
  - Links to statistics of exposure to risk or to other background data
- To examine the case for additional publications such as topic-based fact sheets or more information for regions or local authorities.
- To examine the scope and content of the current first releases of road accident statistics.
- To obtain indications of awareness of the availability of road accident data in SPSS format from the UK Data Archive.
- To consider how web-based publication of and access to road accident statistics can be best developed.

It went on to state that the intention was to assess to what extent the DfT, NAW and SE publication effort is meeting user demand and to identify the scope for useful improvement having regard to the associated resource implications.

It also explained that in doing so, the review would take into account the need for exercise of professional statistical judgement in the compilation and issuing of the statistics, constraints which may arise from considerations of data protection, and the need, within the current or any future level of resources, to allocate effort among requests for information which range from school project work to parliamentary questions, and from single numbers to massive arrays of data. Constructive comment on these issues was invited.

The questionnaire asked:

- which publications were used to obtain road accident statistics and how often,
- whether these publications were accessed in printed form or on the web,
- why the publications used were important to the respondent,
- how specific publications could be improved,
- what additional forms of publication would be useful and why,
- whether the coverage of early publications was appropriate,
- about awareness of availability of road accident data from the UK Data Archive,
- how web access to relevant publications could be improved,
- about usefulness of downloading tables as Excel spreadsheets and of downloading time-series of tables,
- about other ways in which access to the data could be provided via the web,
- for any other comments, and
- which of a number of user categories best described the respondent.

Respondents were invited to identify themselves only if they wished the Working Group to be able to contact them about their response.

The covering note and questionnaire are reproduced in Annex E. They were issued early in May 2002, asking for responses by late June. Most responses had been received by the

end of July, with a trickle continuing into the autumn, amounting in all to about 12 per cent of the roughly 1000 copies sent out.

## **16. RESPONDENTS AND THEIR USE OF PRINTED PUBLICATIONS AND WEB ACCESS**

Of the 124 responses, 45 per cent were from Police Forces, 21 per cent from Local Authorities, 12 per cent from Central Government or its Agencies, and the remainder mainly from road safety organisations, consultancies or researchers. Of those who gave their location, 66 per cent were from England, 22 per cent from Scotland and 11 per cent from Wales.

Of all respondents, 87 per cent reported using *Road Accidents Great Britain*, 37 per cent reported using this frequently, and rather similar percentages of respondents from Scotland and Wales respectively reported using *Road Accidents Scotland* and *Road Accidents: Wales*.

These two publications were also used by at least half as many respondents outside Scotland and Wales respectively.

Among respondents from Scotland and Wales, similar numbers reported using the respective early publications, whereas only 65 per cent of all respondents reported using the early publication for Great Britain.

Numbers using transport statistics publications were in the region of four-fifths of those using the corresponding main road accident statistics publication.

Percentages reporting using the web to at least a substantial degree to access these publications ranged from 11 to 23 for the Great Britain and Scottish publications, with around two-thirds of these respondents also using the printed versions. Only one respondent reported using the web to at least a substantial degree access a Welsh publication.

Respondents who reported having been previously aware of availability of the data from the UK Data Archive amounted to 15 per cent of the total.

## **17. IMPORTANCE OF PUBLICATIONS TO THE USERS**

The road accident statistics are a crucial and central resource for national governments in their formulation of road safety policy and monitoring of its implementation. They also make possible a wide range of research relevant to reduction of risk to road users and procured by government, funded by independent sponsors, or carried out by organisations or individuals on their own account. More locally, the national road accident statistics enable police forces, local authorities and consultants advising them to relate the information that is collected and analysed in their own areas to national patterns and trends in accident involvement and occurrence of injury, and thus help them in important judgements about the exercise of their local responsibilities for road safety and the enforcement of traffic law.

### **17.1 Central government**

In central government, the Department for Transport is responsible for the Government's road safety strategy as set out in *Tomorrow's Roads: safer for everyone* and for oversight of progress towards the casualty reduction targets for 2010. This requires development of national policies for Ministerial decision, encouragement of the extensive and vital contribution of local authorities, for example through Local Transport Plans,

interdepartmental working with the Home Office and the Health and Education Departments, the commissioning and interpretation of research required to underpin future initiatives, and the transparent overall monitoring of progress towards the targets. There are counterpart responsibilities in national government in Scotland and Wales. The two Parliaments and the Welsh Assembly need to be satisfied that Government activity in this socially important and often politically sensitive area is appropriately based upon knowledge, and members of the public expect fully informed responses to queries that they raise. For these purposes, civil servants in all the relevant Departments and researchers and consultants from whom they seek specialist advice need ready access both to extensive regularly and consistently produced tabulations of road accident statistics and to special purpose extraction of detailed data to address less routine questions that can arise, often at short notice.

This requirement is illustrated by the following commitments made in the road safety strategy. To evaluate progress with the strategy and towards the targets every three years requires information about trends in all aspects of accident occurrence. To support road safety education in schools and commission further research into child-related road safety issues requires information about children's accident involvement. To raise standards of goods vehicle and bus and coach driver training and develop schemes for better information and advice for older drivers requires information about the accident involvement of these types of driver. To work with professionals to support guidance on road safety best practice requires information about all aspects of accident occurrence. To progress various aspects of vehicle safety engineering to improve protection to occupants and reduce injury to struck pedestrians and cyclists requires information about the pattern of involvement of vehicles in accidents of different kinds, and to improve public understanding of the risks of road traffic offences requires information about accident occurrence in circumstances likely to arise from the commission of offences. The national road accident statistics are the only comprehensive source of information of these kinds, and where they do not themselves contain information that is required in a particular context, they are often crucial to the design of the research required to obtain the additional information.

Furthermore, in England, the Highways Agency needs continual access to road accident statistics for the trunk roads in the context of its responsibility to manage the network for the benefit of road users of all kinds, and the same applies to the SE and NAW in Scotland and Wales.

## **17.2 Police forces and local government**

Police forces need to target their traffic law enforcement effort and the contributions they make, for example through driver improvement and vehicle rectification schemes as well as in their general relations with the public as road users, to road safety education, training and awareness. Local authorities need to develop policies and programmes for road safety engineering and for education, training and publicity within their Local Transport Plans, and monitor and influence the impact on road safety of other policies for their areas.

In respect of their own areas, police forces and local authorities rely heavily on exactly the data they have collected for those areas as their input to the national road accident statistics. But their responses to the questionnaire make clear the importance they attach to access to the national road accident statistics in placing their local situations in the regional and national context by enabling them to compare local experience with wider trends, thus helping them in formulating policy, monitoring and reporting on progress, and selecting and targeting publicity. Access to data for other police forces and other local authorities enables mutually beneficial comparisons of performance, benchmarking and sharing of experience.



### 17.3 Road safety organisations, researchers and consultancies

Road safety organisations find access to the national road accident statistics crucial in informing their work on policy development and enabling them to base their promotion of safety measures, their campaigning and their public information work on sound knowledge. Researchers and consultancies need access to the data for many kinds of analysis of the risks and consequences of accident occurrence and for forecasting the potential effects of changes in policy, regulation and the implementation of safety measures. This work is carried out both for government under contract and for sponsors of independent research which is able to refresh and cross-fertilise the thinking of government and local authorities. Consultants also use the data in their work for local authorities in the development and monitoring of road safety programmes, in which they play an indispensable role in the Local Transport Plan process and use the national data to set local indicators in the regional and national contexts.

### 17.4 General

It is known from enquiries received that many members of the general public who are interested in road safety statistics use the websites and some buy the national publications. For example, DfT receives between 150 and 200 enquiries per month asking for data, many of these from students, including school children, working on projects or from people searching for safety advice. Dealing with these enquiries requires data extractions that make use of a very wide range of the items of data covered by STATS19.

## 18. EXISTING PRINTED PUBLICATIONS

Notwithstanding the likely increase in access to the national road accident statistics via the web, the responses to the questionnaire make it clear that many users, including many who will also access the data via the web, wish the present printed publications to continue for the foreseeable future, with due consideration for the wide range of suggestions made for improvements to them. **It is therefore recommended that the existing annual series of printed publications of road accident statistics for Great Britain, for Scotland and for Wales should be continued.**

The question was raised whether the data in the annual publications should relate to calendar years as hitherto, or to financial years. As reported in Part 1, this question was resolved in the review of collection of the data in favour of retaining a calendar year basis, and the problems of timeliness of financial year figures for those users who need these may in future be met by the introduction of a quarterly series, as reported in Section 21.2. For these reasons **it is recommended that the annual publications should continue to relate to calendar years.**

There is a long history of recording by some police forces of factors judged by the officer attending a road traffic accident to have contributed to the occurrence of the accident. As a step towards a national system for the recording of such contributory factors, a number of police forces have for several years been using a prototype national form for recording them. As reported in Part 1, this review has decided to include an agreed national form in the data collection process. **It is therefore recommended that timely consideration be given to the inclusion of tabulations of contributory factors data in the annual publications.** A recommendation concerning data already obtained using the prototype form is made in Section 18.1.

Suggestions for improvements to the individual publications are now discussed in turn in order of the sections of each publication to which they refer. *Italics* are used for the titles of existing publications and sections within them.

## 18.1 Road Accidents Great Britain

The *Preface to Road Accidents Great Britain (RAGB)*, after recognising that local and national government and local police forces work closely to achieve a common reporting standard for accident data, includes the following caveat concerning the coverage of the national road accident statistics:

“...readers should note that while very few, if any, fatal accidents do not become known to the police, there is evidence that an appreciable proportion of non-fatal injury accidents are not reported to the police and thus are not included in this publication. In addition research has shown that up to a fifth of casualties reported to the police are not included in the statistical return. Moreover, studies also show that the police tend to underestimate severity of injury because of the difficulty in distinguishing severity at the scene of the accident, and that reporting rates are lower for the more vulnerable road user groups.”

Users would find it helpful to have immediately to hand an up-to-date summary and critique of the key evidence concerning the degree of coverage of the data, their relationship to data that might be obtainable through the National Health Service, and available indications of total numbers of casualties that would result from complete coverage if this were practicable. This should include and extend the information currently provided in the first two paragraphs of the *Notes* immediately preceding the *Notes to individual tables*. Users would also find it helpful to have similarly to hand an explanation for the numerically small but potentially puzzling differences between numbers of accidents or casualties in *RAGB* and in the Scottish and Welsh publications – differences which result from different treatment of small numbers of reports and amendments which are very late in reaching the compilers of the national databases.

**It is recommended that an appropriately prominent place be found in *RAGB* for a note concerning coverage of the data, levels of reporting and the relationship between data in the Scottish and Welsh publications and data in *RAGB* for Scotland and Wales.**

A number of users commented on difficulties they encountered in finding their way to the tables and charts they were seeking in *RAGB*, and on the relationship between the *Contents* and the *Index to tables and charts*.

**It is recommended that a prominent cross-reference be made at the foot of the *Contents* to the *Index to tables and charts* and its complementary purpose, that the cross-reference to the *Contents* at the head of the *Index to tables and charts* be made more prominent and that a navigation diagram conveying the logic underlying the sequencing of tables and charts should be attempted.**

The layout of a number of the tables in *RAGB* is already demanding, and in some cases acceptance of the recommendations that follow will make them more so. In the light of related suggestions from a number of users, **it is recommended that professional design advice be sought on the layout of *RAGB*, subject to final control of remaining with the responsible professional statisticians.**

Some users who are also providers of the data, or who are in close contact with providers, express the view that it would help to maintain the motivation of those involved in collecting

the data, and thus the quality of the data themselves, if *RAGB* contained each year a short and reader-friendly note highlighting a few of the ways in which research that had depended upon use of the data had led in the previous year to useful practical results. **It is recommended that Road Safety Division consider producing annually for *RAGB* a short note highlighting a few of the most clearly useful research findings from the previous year that depended on use of the national road accident statistics.**

Some users asked that the *article reviewing progress towards the 2010 casualty reduction targets* should include tables of numbers of casualties and casualty rates in intervening years that would correspond to being on course to meet the targets. However, the Working Group supports the current policy of expressing the targets in terms of percentage changes and avoiding any form of presentation that could be interpreted as regarding any particular numbers of casualties as satisfactory or acceptable. The current curves in *Charts 1a-c of the article*, showing the average annual rate of reduction required from 1996 just to meet the targets, are regarded as providing a comparator for progress so far which is consistent with this policy.

There is considerable interest in the data about factors contributing to accident occurrence that are currently being collected by a number of police forces using the prototype national form. **It is therefore recommended that an *article about existing contributory factors data* be included in *RAGB 2002* or *RAGB 2003*.**

In response to suggestions that more extensive intermodal data be provided, **it is recommended that 10-year moving average numbers of casualties in other modes be added to *Table 5c*, with an explanatory note in the *Notes to individual tables* and a footnote referring the user to *Transport Statistics Great Britain* and *Transport Trends* for further details and for exposure data for the other modes.**

Some users would welcome somewhat fuller exposure data for movement by road. Although vehicular traffic by vehicle type and by road class are given separately in *Table 1*, the joint distribution by vehicle type and road class distinguishing between built-up and non built-up roads that provides the denominators for the rates in *Table 26* is not included. Users would also find it helpful for key exposure data from the National Travel Survey, such as estimated distances walked, cycled, motorcycled, driven in cars and travelled as passengers in cars, each by age of traveller, to be summarised.

**It is recommended that *Table 1* be extended to include traffic data by road class and vehicle type jointly for the latest year and as a yearly average for the baseline period 1994-1998, and key distances travelled by age of traveller as estimated from the National Travel Survey for these or similar periods.**

In this connection users will need to be aware that the breakdown of traffic between built-up and non built-up roads is being replaced by a breakdown by urban and rural areas, using the type of area in which the road lies as the criterion, rather than the speed limit. This is taking time, but estimates on the new basis going back to 1994 (the beginning of the baseline period for the current casualty reduction targets) should be available by May 2003, in time for use in *RAGB 2002* and the first triennial review of the road safety strategy and targets. Accidents and casualties will need to be categorised by urban and rural road according to the definitions used in categorising the traffic, instead of by built-up and non built-up road, for the purpose of estimation of rates per hundred million vehicle-km. It will still be possible to categorise the accidents and casualties also by built-up and non built-up road according to speed limit as hitherto, and it will be for consideration which of the existing tabulations of this kind are continued in the future, and what tabulations by urban and rural road on the new basis are introduced.

Accidents and casualties can be categorised according to whether they occur on single-carriageway or dual-carriageway roads, and users would find it helpful to have estimates of the amounts of traffic on the two kinds of road. This issue relates very largely to class A roads, and **it is recommended that the practicability of estimating the proportions of A-road vehicle-km travelled on single- and dual-carriageways by vehicle-type and by urban and rural road be investigated.**

In the tabulation of accidents by numbers of casualties involved that is given in *Table 21*, the upper tail of each distribution is summarised by giving the number of accidents having  $n+$  (ie  $n$  or more) casualties. For numbers of serious or slight casualties, presenting the tails of the distributions in full would occupy more space than is probably justified, but for numbers killed the complete distribution could be provided either in very few extra columns or in a footnote. **It is recommended that complete distributions of fatal accidents by number killed be presented in *Table 21*.**

In view of user interest, especially by the Driving Standards Agency, in young drivers and the value of having information by year of age up to age 24, **it is recommended that the range of road user types in *Table 33* be extended to include drivers and riders by vehicle type.**

Concerning the information provided by county and unitary authority in Tables 45 and 46, users expressed concerns of two kinds: that coverage should be extended to Boroughs within Greater London and to Districts within both metropolitan and other counties, and that the data provided for each authority should relate more closely to the current casualty reduction targets and best value performance indicators. Rather than enlarge further these already extensive tables, the former concern is addressed in Section 6 of this report by recommending an additional publication. The latter concern calls for traffic estimates for each authority to be included in Table 46. These should be available from 1994 onwards, together with advice on their use, by May 2003, in time for use in *RAGB 2002* and in the 2003 Annual Progress Reports on Local Transport Plans. It also calls for reconsideration of the casualty data in Table 46 because the total number of slight casualties can be obtained only by subtraction, and child casualties are distinguished only for pedestrians, whereas the child target is for all children killed or seriously injured.

**It is recommended that *Table 46* should include for each authority the estimated vehicle-km and, for all road users, the numbers of slight casualties and of children killed or seriously injured.**

Some local authority users were concerned that media coverage of the content of *RAGB* occurred before copies reached the authority, and to address this concern **it is recommended that *Tables 45 and 46* be emailed to local authorities ahead of the publication of *RAGB*.**

For consistency with current use of the title *Articles* for the reports on topics of current interest that appear at the front of *RAGB*, **it is recommended that *Review Topics* be replaced by *Articles* in the title of the index to reports appearing in previous years since 1951.**

## **18.2 Road Accidents Scotland**

The Working Group noted that users of *Road Accidents Scotland (RAS)* had been consulted in 2001 through a questionnaire accompanying every copy of *RAS 2000* and through the Liaison Group on Road Accident Statistics (LGRAS) in Scotland about the coverage and presentation, and the resulting comments had been taken on board in producing *RAS 2001*.

In particular, some users' comments to this review about the value of 5-year moving averages in the context of the sizes of numbers of accidents and casualties appearing in many national tables for Scotland had been addressed by the careful balance struck in *RAS 2001* between presenting single-year data and 5-year averages.

A user noted that in the tables of *RAS* in which numbers of casualties are shown by age, the age-banding used prevents direct comparison at some ages with corresponding data for Great Britain as presented in *RAGB*. It is recognised that providing data for single years of age, as is done up to age 24 in *Table 33 of RAGB*, would for Scotland result in presenting many small numbers whose statistical variability would be large in relation to their absolute values. It is therefore not recommended that data for single years of age be presented in *RAS*. However, **it is recommended that consideration be given with LGRAS as to whether the age-bands used in *RAS* could be aligned with those used in *RAGB*.**

Notwithstanding the recent consideration given with LGRAS to the coverage of the tables by local authority in *RAS*, in the light of the expected availability from 2003 of traffic data for local authority areas and the form of the target for slight casualties, **it is recommended that a decision be made in consultation with LGRAS as to where traffic estimates for local authority areas can best be included in *Table 36, 37, 40* or a new table.**

### 18.3 Road Accidents: Wales

The Working Group noted that the content and structure of *2000 Road Accidents: Wales* had been revised in the light of views previously expressed by users. In particular, in *Tables 2.2 and 12.3* the figures for accident rates and traffic respectively on major roads already distinguish between trunk roads and other major roads and will in future also include minor roads. Population figures for local authority and Police Force Areas will be included in *Tables 5.7 and 5.8* to accompany the casualty rates.

Notwithstanding this recent consideration, in the light of the expected availability from 2003 of traffic data for local authority areas and the form of the target for slight casualties, **it is recommended that a decision be made in consultation with users in Wales as to where traffic estimates for local authority areas can best be included in *Chapter 5*.**

Some users suggested that separate tables in English and Welsh would be preferable to the current bilingual tables, but the Working Group recognises that this is a policy issue for the NAW that extends far beyond the presentation of road accident statistics.

### 18.4 The early publications

The publication of principal data for the previous year in *Road Casualties Great Britain: Main Results*, *Key Road Accident Statistics (Scotland)* and *Road Casualties in Wales* ahead of the full annual publications is clearly appreciated greatly by users.

A user suggested that it would be helpful for *Key Road Accident Statistics (Scotland)* to include accident and casualty data by police force area. **It is recommended that LGRAS be consulted regarding the inclusion of accident and casualty data by police force area in *Key Road Accident Statistics (Scotland)* subject to the same caveat concerning subsequent corrections as applies to other data in that publication.**

In Section 18.1 it was recommended that the local authority tables in *RAGB* be emailed to the local authorities concerned ahead of publication to help them to deal with media interest. To do that would not amount to release of data ahead of its first publication because publication of *Road Casualties Great Britain: Main Results* is taken to be the first publication

of the data for the year concerned, and from that date, enquiries are dealt with using the whole dataset. By the same token, however, emailing of tables to local authorities ahead of publication of *Road Casualties Great Britain: Main Results* would amount to release of data ahead of its first publication, and this cannot therefore be recommended.

## 19. ADDITIONAL FORMS OF PRINTED PUBLICATION

*For Scotland and Wales, it is convenient for full tabulations by local authority to be included in the annual publication of national statistics, but to do the same for Great Britain by including data at District and London Borough level in Tables 45 and 46 of RAGB would make these tables unwieldy. Moreover, users would value fuller data at regional and local authority level than would be provided simply by extending these tables to cover other authorities, and indicated that they would welcome a fresh counterpart of the former publication Road Accident Statistics: English Regions (RASER).*

*Such a publication would be a good place in which to satisfy the wish of users in English local authorities for tables of numbers of casualties occurring on trunk roads and local roads separately in their areas, and to tabulate relevant Best Value Performance Indicators.*

In the context of the expectation that all local authorities and others working in partnership with them will contribute fully to the implementation of the Government's road safety strategy and achievement of the casualty reduction targets, it is important for all concerned to have access to relevant local and regional road accident statistics. For these reasons it is **recommended that early consideration be given in consultation with English local authorities and police forces through SCRAS to an annual publication of local and regional road accident statistics for England containing those tables and charts most relevant to local implementation of the road safety strategy, including tables of numbers of casualties on trunk roads and local roads in each area and of relevant Best Value Performance Indicators.**

*Some users would value the production and regular updating of leaflets analogous to the Fact Sheet series, covering, for example, the accident-involvement of particular road user groups or the occurrence of particular types of accident, or highlighting fresh research findings that supersede previously established information. The statisticians responsible for the national road accident data will continue to exercise their independent professional judgement as to when and on what topics to recommend publication of such leaflets. In addition, however, policy staff may also identify the need for and coverage of more explicitly policy-oriented leaflets, and the commissioning of their design and editing should then be a matter for the relevant policy staff, with the statisticians providing the specific extracts of data needed for the purpose. It is recommended that policy staff remain alert to the potential value of policy-oriented leaflets based on the national road accident statistics and produce or commission such leaflets when they will promote the implementation of the road safety strategy, and that the responsible statisticians provide the relevant extracts from the data.*

## 20. ACCESS AT INDIVIDUAL RECORD LEVEL

Access to the national road accident statistics in the form of individual accident, vehicle and casualty records via the UK Data Archive ( <http://www.data-archive.ac.uk> ) in a format suited to analysis by means of the widely used *Statistical Package for the Social Sciences (SPSS)* has proved useful to over 50 users. It is likely that these users have accessed the data in ways that would have required numerous requests for tabulations from central government

statisticians if their access had been by that route. Central government statisticians have also supplied data at individual record level to some users

It is, however, unclear how the charges that users pay for access to the data via the UK Data Archive relate to charges made for the supply of tables or of data at individual record level by central government statisticians. This issue will become more far-reaching when, as is likely in due course as discussed in **Section 8.3**, access to the data at individual record level becomes available (within the rules of confidentiality and data protection) via the web.

**It is recommended that arrangements between the DfT and the UK Data Archive for access via the latter to the national road accident statistics be reviewed in the light of the likelihood of wider arrangements for access to the data at individual record level.**

## **21. ACCESS VIA THE WEB**

Although less than 20 per cent of respondents reported using the web to at least a substantial degree to access the existing publications, there is a clear expectation that access to the data via the web will increase, and will extend far beyond web-mounting of the existing publications. It has been demonstrated to the Working Group that there are effectively no technological constraints on the level of access that can be provided via the web. What is provided is a matter of priorities, resources and limitations such as those of confidentiality and data protection. Any web access provided by DfT, NAW or SE will also need to comply with relevant national government and ONS policies concerning web access to national statistics.

The possibilities are discussed here in terms of the same three levels that users were asked about in the questionnaire, namely web access to the existing publications, access to existing tables as Excel spreadsheets and to time-series of existing tables, and other forms of web access. **It is recommended that websites providing access to the national road accident data should have links to websites containing other relevant data such as data about exposure to risk, traffic offences and health, and should themselves be accessible by links from the ONS website.**

### **21.1 Web access to the existing publications**

The main request from users for improvement in web access to the existing publications was for more help in navigating within and between the publications by means such as more links and better search facilities. **It is recommended that the way in which existing publications of the data for Great Britain are presented on websites is reviewed with the aim of improving access, including appropriate links between the publications for Great Britain, Scotland and Wales, and that professional advice be sought on the design of that presentation.**

Another request from users was for a format to be adopted which allows copying and pasting of extracts into Word documents. This will be met by providing the tables in the form of Excel spreadsheets as discussed in **Section 21.3**.

It is important to the effective working of the statisticians responsible for the database that contact details provided on the website do not lead to frequent interruptions of demanding statistical work by direct telephone calls to individual staff. If instead of individual telephone numbers, a single enquiry number is given, and that telephone is suitably staffed, then enquiries can be passed on to the most appropriate statistician to be dealt with promptly but at a time consistent with progress with other tasks. This is already the case in Scotland and Wales. **It is recommended that telephone enquiries from users to statisticians in the**

**DfT responsible for the national road accident statistics be made to a single enquiry number staffed so that enquiries are passed to the most appropriate officer for timely attention without other tasks being interrupted.**

### **21.2 A new series published on the web**

A new series of quarterly estimates of numbers of road accidents and casualties is being published by the DfT beginning early in 2003 on the Department's website at <http://www.dft.gov.uk/pgr/statistics> with paper copies available on request

Future estimates will be published in two stages. The first release for each quarter will provide total estimated casualty and accident numbers and will be published five months after the end of the quarter. The next release (three months later) will provide more detailed figures (such as estimates for a range of road user groups, including children, and by road class), together with the first estimates of total casualties and accidents for the next quarter.

The figures will be estimates based on information available to the DfT fourteen weeks after the end of each quarter. Estimates will be revised in subsequent bulletins as more information becomes available and full details will be published as usual in the annual publications.

The series is being released initially as experimental statistics, a National Statistics designation for statistics that are new and still subject to testing of their ability to meet customer needs. The estimates will be robust enough to give a good overall indication of trends, but while the series is experimental assurance of their quality will depend on monitoring of the stability and accuracy of the estimates.

When the quarterly series is established, it will enable those who require estimates for financial years to obtain them readily for all categories covered by the series.

The Working Group noted that LGRAS saw no need for publication of a quarterly series for Scotland.

### **21.3 Excel spreadsheets and time series**

The potential value of being able to download tables from the existing publications as Excel spreadsheets was widely recognised by users, and work on providing this facility has already begun, and is complete for RAW. This will not only enable users to paste tables or extracts from them directly into documents, but also enable them to manipulate numbers in the tables directly for the purposes of their own analyses. **It is recommended that tables in the current issues of the annual publications be made available as Excel spreadsheets as soon as is practicable.**

The prospect of being able to download time-series of the tables that appear in the annual publications was also widely welcomed by users. Suggested spans of time-series ranged from 5 to 20 years back, and in the context of the road safety strategy and casualty reduction targets, a valuable first objective would be to make available as Excel spreadsheets time-series of all tables from 1994, the first year of the baseline period for the current targets. This is also the year from which national and local authority are traffic estimates on the new basis are expected to be available in 2003, and from which accidents will first be classified as urban or rural on the new basis being used for the traffic estimates. In moving towards this first objective, relevance to the monitoring of progress with the road safety strategy would be a logical main criterion for deciding in what order to work on making the time-series available.



A second objective could then be to make available key time-series going back to 1981, the start of the baseline period for the previous national casualty reduction target. This could be a selective exercise, concentrating on time-series most relevant to monitoring of progress towards the targets, on those not requiring traffic estimates, and recognising that it may not be practicable to take as far back as 1981 the new classification of accidents as urban or rural. Passage of time and the number of substantial differences both in conditions affecting accident occurrence and in the details of data collection between the 1970s and 1980s make it unlikely to be cost-effective to extend the availability of time-series further back than 1981.

Careful consideration will need to be given to ways of displaying time-series on screen for those who wish to refer to them without necessarily downloading extensive spreadsheets.

**It is recommended that time-series of tables from the annual publications be made available in two phases: Phase 1 – all tables back to 1994 in order of relevance to monitoring of progress with the road safety strategy; and Phase 2 – key tables back to 1981, selected for relevance to monitoring of progress towards the targets.**

Because of the importance of being able to relate accident and casualty data to relevant data concerning exposure to risk, **it is recommended that the feasibility of providing matching time-series of exposure data from road traffic data and the National Travel Survey be examined.** It is recognised that only some of the exposure data that can be provided for Great Britain as a whole can be provided also for Scotland, Wales or local authority areas.

#### **21.4 Other forms of web access**

Expectations of users concerning other forms of web access were modest, with specific suggestions confined to ability to specify age-bands for tables by age of driver or casualty, and making available a reduced dataset which schools could use to analyse as they chose in the course of classroom and project work. Concerning the latter **it is recommended that the suggestion of a reduced road accident dataset accessible on the web for use in schools be referred to DfT's advisers on its school curriculum website for consideration.**

The Working Group looked beyond the current expectations of users to envisage the national road accident data being accessible in the form of individual accident, vehicle and casualty records subject to the requirements of confidentiality and data protection. These are basically that the degree of detail to which access is provided must not be sufficient to allow analysis of the data as a whole to allow any individual to be identified.

The technical means for providing such access is likely to be an established query language, but it is unlikely that DfT statisticians could be resourced themselves to develop, launch and provide user support for access in this form. Instead, **it is recommended that**

- (a) principles be formulated under which one or more service providers would be contracted by the DfT to provide web access to the data at an individual record level for users and it would be transparent what proportions of the cost of access were met by users in different categories;**
- (b) arrangements be made to provide access in line with these principles; and**
- (c) access through the UK Data Archive be brought within these arrangements.**

## 22. SUMMARY OF RECOMMENDATIONS

The recommendations made in the foregoing sections are listed here according to their resource implications, distinguishing:

- those that could be implemented by adapting the present procedures with few additional resources;
- those that would require appreciable extra resources for initial implementation, but could subsequently be incorporated into the procedures with few additional ongoing resources; and
- those that would require appreciable extra resources both initially and on an ongoing basis.

It is beyond the remit of this review to estimate the resource requirements, and resource-dependent recommendations are therefore subject to assessment by the DfT in relation to the advantages they would offer to users and their demands upon resources.

### 22.1 Adaptation of present procedures requiring few extra resources

**It is recommended that:**

the existing annual series of printed publications of road accident statistics for Great Britain, for Scotland and for Wales should be continued;

the annual publications should continue to relate to calendar years;

complete distributions of fatal accidents by number killed be presented in *Table 21* of *RAGB*;

*Tables 45 and 46* of *RAGB* be emailed to local authorities ahead of the publication of *RAGB*; and

*Review Topics* be replaced by *Articles* in the title in *RAGB* of the index to reports appearing in previous years since 1951.

Telephone enquiries from users to statisticians in the DfT responsible for the national road accident statistics be made to a single enquiry number staffed so that enquiries are passed to the most appropriate officer for timely attention without other tasks being interrupted;

### 22.2 Changes requiring appreciable extra resources only initially

**It is recommended that:**

an appropriately prominent place be found in *RAGB* for a note concerning coverage of the data, levels of reporting and the relationship between data in the Scottish and Welsh publications and data in *RAGB* for Scotland and Wales;

a prominent cross-reference be made at the foot of the *Contents* of *RAGB* to the *Index to tables and charts* and its complementary purpose, that the cross-reference to the *Contents* at the head of the *Index to tables and charts* be made more prominent and that a navigation diagram conveying the logic underlying the sequencing of tables and charts should be attempted;

professional design advice be sought on the layout of *RAGB*, subject to final control of all aspects of the substance of the content remaining with the responsible professional statisticians;

an *article about existing contributory factors data* be included in *RAGB 2002* or *RAGB 2003*;

10-year moving average numbers of casualties in other modes be added to *Table 5c* of *RAGB*, with an explanatory note in the *Notes to individual tables* and a footnote referring the user to *Transport Statistics Great Britain* and *Transport Trends* for further details and for exposure data for the other modes;

*Table 1* of *RAGB* be extended to include traffic data by road class and vehicle type jointly for the latest year and as a yearly average for the baseline period 1994-1998, and key distances travelled by age of traveller as estimated from the National Travel Survey for these or similar periods;

the practicability of estimating the proportions of A-road vehicle-km travelled on single- and dual-carriageways by vehicle-type and by urban and rural road be investigated;

the range of road user types in *Table 33* of *RAGB* be extended to include drivers and riders by vehicle type;

*Table 46* of *RAGB* should include for each authority the estimated vehicle-km and, for all road users, the numbers of slight casualties and of children killed or seriously injured;

consideration be given with LGRAS as to whether the age-bands used in *RAS* could be aligned with those used in *RAGB*;

a decision be made in consultation with LGRAS as to where traffic estimates for local authority areas can best be included in *Table 36, 37, 40* or a new table in *RAS*;

a decision be made in consultation with users in Wales as to where traffic estimates for local authority areas can best be included in *Chapter 5* of *RAW*;

LGRAS be consulted regarding the inclusion of accident and casualty data by Police Force area in *Key Road Accident Statistics (Scotland)* subject to the same caveat concerning subsequent corrections as applies to other data in that publication;

arrangements between the DfT and the UK Data Archive for access via the latter to the national road accident statistics be reviewed in the light of the likelihood of wider arrangements for access to the data at individual record level;

websites providing access to the national road accident data should have links to websites containing other relevant data such as data about exposure to risk, traffic offences and health, and should themselves be accessible by links from the ONS website;

the way in which existing publications of the data for Great Britain are presented on websites is reviewed with the aim of improving access, including appropriate links between the publications for Great Britain, Scotland and Wales, and that professional advice be sought on the design of that presentation;

tables in the current issues of the annual publications be made available via the web as Excel spreadsheets as soon as is practicable;

time-series of tables from the annual publications be made available via the web in two phases: Phase 1 – all tables back to 1994 in order of relevance to monitoring of progress with the road safety strategy; and Phase 2 – key tables back to 1981, selected for relevance to monitoring of progress towards the targets; and

the feasibility of providing matching time-series of exposure data from road traffic data and the National Travel Survey be examined.

### **22.3 Changes requiring appreciable ongoing extra resources**

#### **It is recommended that:**

timely consideration be given to the inclusion of tabulations of contributory factors data in the annual publications;

Road Safety Division consider producing annually for *RAGB* a short note highlighting a few of the most clearly useful research findings from the previous year that depended on use of the national road accident statistics;

***early consideration be given in consultation with English local authorities and Police Forces through SCRAS to an annual publication of local and regional road accident statistics for England containing those tables and charts most relevant to local implementation of the road safety strategy, including tables of numbers of casualties on trunk roads and local roads in each area and of relevant Best Value Performance Indicators;***

policy staff remain alert to the potential value of policy-oriented leaflets based on the national road accident statistics and produce or commission such leaflets when they will promote the implementation of the road safety strategy, and that the responsible statisticians provide the relevant extracts from the data;

the suggestion of a reduced road accident dataset accessible on the web for use in schools be referred to DfT's advisers on its school curriculum website for consideration; and

in connection with web access to the national road accident statistics as a whole:

- (a) principles be formulated under which one or more service providers would be contracted by the DfT to provide web access to the data at an individual record level for users and it would be transparent what proportions of the cost of access were met by users in different categories;
- (b) arrangements be made to provide access in line with these principles; and
- (c) access through the UK Data Archive be brought within these arrangements.

## ANNEX A

### THE 2002 QUALITY REVIEW OF ROAD ACCIDENT INJURY STATISTICS

#### PROJECT DEFINITION AND SCOPE OF THE REVIEW

##### 1 Introduction

- 1.1 Personal injury road accident statistics were first collected in 1909. The modern 'STATS19' collection system was established in 1949 and the current collection system was implemented in 1979 following a wide-ranging review. Road accident statistics are essential for informing and monitoring road safety policy at local, national, and international level. Locally they have a long established application to support remedial engineering work on public roads. At both a local and national level they are essential for steering road safety strategy and underpinning targeted casualty reduction. Within the EU they contribute, along with road accident data from other Member States, to European road safety initiatives and the sharing of best practice guidance.
- 1.2 Individual police forces and local authorities require road accident statistics to support their own road safety policy programmes. The collection process and data collected vary in local authority and police force areas, reflecting different local road safety requirements and circumstances. However, each local area is required to report the same set of accident records for national purposes and to transmit them to central government. These are popularly known as STATS19 records, named after the code number of the collection form
- 1.3 The accuracy and credibility of the STATS19 collection process depends upon close co-operation between central government, local government and police forces. It is a voluntary process. There is no specific statutory duty upon the police or local authorities to report STATS19 road accidents to central government. The STATS19 system is jointly managed and owned by the Standing Committee on Road Accident Statistics (SCRAS).
- 1.4 In England, within each local area, STATS19 data are collated by a central unit referred to as a Local Processing Authority (LPA) which can be managed directly either by the police or local authority, or be sub-contracted to a private consultancy. In Scotland and in Wales the Scottish Executive (SE) and the National Assembly for Wales (NAW) act as the LPA for the Department of Transport, Local Government and the Regions (DTLR). There are 58 LPA's in Great Britain of which just under half are managed by local police authorities and the rest by local authorities.
- 1.5 The STATS19 report form consists of an accident record, a vehicle record to be completed for each involved vehicle and a casualty record for each casualty arising from the injury accident. In 2000, local authorities and police forces collected, coded, validated and reported 234,000 accident records, 430,000 vehicle records and 320,000 casualty records for central government.

## **2. The Quality Review : 2002**

- 2.1 In earlier years the STATS 19 collection system was subjected to a quinquennial review to check that it continued to provide essential information for government, but minimised the burden of form filling and data provision upon local police forces and local authorities. This was invariably the case, but each review was able to identify minor modifications to the system in response to changing road safety issues and practicalities of data collection. It has always been recognised that all participants in the generation of STATS19 data derive benefit from its application in the quest to improve road safety; equally all acknowledge that the costs of collection must demonstrate value for money.
- 2.2 The quinquennial review process has been succeeded by an enhanced review process designed to improve public confidence in National Statistics generally. Consequently this review is being organised in accordance with the National Statistics Quality Assurance Programme Board guidance paper 'Commissioning a National Statistics Review', following publication of the White Paper 'Building Trust In Statistics' (available on the Office of National Statistics web-site [www.statistics.gov.uk](http://www.statistics.gov.uk)). The 2002 quality review of the STATS19 injury road accident data collection system will contribute to this process.
- 2.3 The review will be overseen by a project board that will include the Chairman of SCRAS; the Review Project Manager; an independent assessor; and a quality assurance programme manager from the Office of National Statistics (ONS).
- 2.4 The review will be conducted by a working group, formed from the SCRAS membership. The core representation will be as follows:-

### **Police representatives**

Chief Superintendent J Moore	Association of Chief Police Officers (England, Wales)
Superintendent L Wynne	Association of Chief Police Officers (Scotland)

### **Local Authority representatives**

Mr J Devenport	London Local Authorities ( including TFL
Mr A Duff	Convention of Scottish Local Authorities
Mr D Sherborne	Northern Local Authorities
Mr J Shortland	Midlands, East Anglia and Southern Local Authorities
Mr A Rookes	Welsh Local Authorities

### **Devolved Administration**

Mrs S Demery	National Assembly for Wales
Mr F Dixon	Scottish Executive

### **DTLR**

Mr Anil Bhagat	Transport Statistics Roads 5
Mr D Wilson	Transport Statistics Roads 5
Mr P Wilding	Review Project Officer

### **3. The aims of the 2002 quality review**

3.1 The aims of the review are to confirm the information needs of users and to assess whether the collection system fulfils its requirement to provide accurate and credible road accident statistics to meet these needs. It also has to confirm that the burden of provision is acceptable to data providers. With this in mind, the general scope of the review will cover the following issues, but the detail will evolve through the consultation process and discussion within the working group and final SCRAS ratification-

- **Evaluation of 1997 review changes. Were they effective?**
- **Concerns about current reporting and coding practices.**
- **Casualty reduction targets and proposals for changes in severity definition.**
- **Proposals for the addition of new variables and values.**
- **Proposals for the deletion of under-used variables and values.**
- **Proposal to formally adopt the collection of contributory factors.**
- **Data linkage with health, crime and socio-economic statistics.**
- **International perspective and commitments.**
- **Availability and presentation of national road accident statistics.**
- **Data protection.**
- **Ownership, supply and charging arrangements for national and local road accident statistics.**
- **Standard Formats for the supply of STATS19 data to DTLR/SE/NAW**

3.2 The review will, of course, cover other issues that are raised by participants. There will also be a confirmation of user needs based upon consultation.

### **4. Consultation**

4.1 The review officer will arrange for the provision of questionnaires to both data users and data providers to gather information about the STATS19 collection system and the broad range of road accident analyses which it supports. This will encompass central government policy users, external road safety organisations, local police forces and local authorities. The response from local authorities, the Scottish police forces, SE and NAW will be co-ordinated by representatives on the SCRAS working group. The response from police forces in England and Wales and road safety organisations in England will be processed by DTLR. SE and NAW will also directly consult road safety organisations in their regions. Consultees will also be sent a copy of this 'Project definition and scope of the review' paper to explain the review process and to outline some topics about which it would be useful to elicit a formal response. An advertisement will also be placed in the SCRAS newsletter and on the DTLR web-site to ensure as wide a consultation process as possible.

4.2 The review officer will reply to consultees once the results of the review are finalised, and a programme of regional meetings involving local authorities and police will be organised to explain the review findings and to ensure that there are no fundamental objections to the conclusions and recommendations.

## 5 Final report

- 5.1 The final review report will be produced in collaboration with the Office of National Statistics to ensure that it meets quality assurance standards for National Statistics. The aim is to provide a final report to Ministers in October 2002 and then to publish in early December 2002. This should be alongside revised 'STATS20' and 'STATS21' documents which define the detail of the 'STATS19' data items required and how they should be checked and supplied.

## 6 Initial scope of the review

The 'aims of the review' identified 12 issues in 3.1 above that the review could usefully address. Notes and ideas relating to each of these issues are set out below to assist the consultation process. Views on these issues, and on any other matters which participants wish to raise would be welcomed.

### 1. Evaluation of 1997 review changes. Were they effective?

- Were the data-inputting costs and disruption arising from modifications to existing variables acceptable?
- Are the new variables adopted in 1999 producing useful and reliable information?
  - Accuracy of 'Place accident reported'.
  - Is driver and casualty post-code data providing data linkage potential?
- Is the STATS 19 reporting requirement now clear for severity of injury, and also the definitions of 'public road' and 'reportable accident'?
- Is the difference with the reporting requirement of the road traffic act clear? If not, why was the 'memo card' supplement to STATS 20 not taken up by local police forces?
- Do 1999 and 2000 statistics reveal any significant changes following the 1997 review:- e.g.
  - Ratio between severe and slight injuries following clarification of classification requirement for 'whiplash neck injury'.
  - Change in trend in slight accidents following clarification of 'public road'.
  - Boarding and alighting accidents on buses following clarification that accidents in bus stations should be excluded.
  - Increase in completeness of breath test results in injury accidents following review discussion.
  - Increase in single cycle accidents following clarification that they should be included in the STATS19 requirement.

### 2. Concerns about current reporting and coding practices.

- Differences in the extent to which police forces are not keeping to the '30 day accident reporting rule'



- A few police forces are considering reducing the STATS19 reporting requirement for 'over the counter' reported accidents (mostly slight accidents). This raises the issue of whether this is in fact an efficient practice for reporting accidents some time after the accident has taken place because of the difficulty of fully completing a STATS19 form in these circumstances. The review could consider the benefits/disbenefits of a 2 tier reporting requirement to simplify the reporting of self reported accidents (currently coded as '2 - elsewhere' for the 'place accident reported' variable).
- 'Place accident reported'. Currently some confusion over interpretation.
- Completeness of post –code data?
- Are hand held global positioning systems (GPS) devices available for reporting officers to improve grid reference information? Who pays for the devices?
- What is the situation concerning the development of the standardised local report form?
- Many police forces and local authorities report on a financial year basis. It would simplify their provision of STATS 19 data, and enhance the comparison of local and national statistics, if national road accident statistics were accounted for on a financial year basis instead of a calendar year basis.

### **3. Casualty reduction targets and proposals for changes in severity definition.**

- The 1997 review addressed the need for more discrimination in the severity of injury definitions in order to identify road accident costs more accurately. The review rejected the case for introducing a 'hospitalised' subset of serious injury and for splitting slight injury into 'visible' and 'non-visible' injury classifications.
- This issue has been raised again by the Association of Chief Police Officers – Scotland (ACPO(S)) – as they did during the 1997 review – and also by the Department of Health (DoH), and will need to be addressed again.
- Both the DoH and DTLR/SE/NAW have produced 2010 casualty reduction targets. The DoH accident reduction target (10% reduction, but no specific target for road accidents) specifically defines serious injury as a 4 day hospital admission. This is a much narrower definition than the definition of serious injuries in road accidents underpinning the DTLR/SE/NAW casualty reduction target (40% reduction in fatal and serious injuries).
- Severity definition changes cannot be introduced prior to 2010 if they change or destabilise current statistics for 'serious' and 'slight' casualties as this will lead to a loss of credibility in the monitoring (and targeting process). However, if acceptable to the police, disaggregation of the

- 'serious' classification could be made prior to 2010 that would still allow monitoring of 2010 targets as long as it did not confuse police classification between slight and serious categories.
- The current police view is that identifying hospital admission is too onerous. Does post coding information have the potential yet to estimate the proportion of seriously injured road accident casualties, who are hospitalised for 4 days, by matching road accident records with DoH records. Probably not at a national level.

#### **4. Proposals for the addition of new variables and values.**

- Work related accidents.
  - Explore possibilities with the Association of British Insurers (ABI).
  - Problem of defining 'work – related'. Is there a standard definition of company car use for 'company – business'.
- Damage only accidents
  - Follow on from last review. Explore possibilities with ABI.
- School child injury after having alighted from a school bus.
  - Problem of defining 'after having alighted'. Hard to see what remedial action this could support apart from publicity.
- Mobile phones
  - Strongly supported by Ministers in the 1997 review. Rejected by the Association of Chief Police Officers (ACPO) as too difficult and onerous to collect. This could be considered as an additional causation factor.
- Driver experience from Driving licence number
  - Could be too difficult to collect. A driving licence is not always carried by drivers, and the length of number could lead to coding difficulties. Stirs up controversy about national identity cards. Is it a better indicator of experience than age of driver which is simpler to collect/estimate?
- Text description to help identify trunk road accidents.
  - Rejected at the last review. It was decided that the supply of this information should be decided locally between local processing authority and the Highways Agency and its contractors. What is the potential for hand held GPS to supply this crucial information in the next few years?
- Seat belt and child restraint usage
  - An amendment to the Commission's seat belt wearing directive (91/671/EEC) seeks to;- (1) increase the use of seat belts or appropriate child restraints especially in the rear seats of cars and (2), to increase the use of seat belts, where fitted, in other vehicles. This may lead to demands for re-instating the collection of information about the wearing of seat belts to assist monitoring of this priority road safety measure. Although there are difficulties in collecting information, especially for slight injury accidents, in which paradoxically the injury reducing effect of belt usage is most effective, it is commonly collected by other Member States.

- Air Bag deployment
  - As with restraint use, air bag deployment is critical in influencing the severity of injury for a given accident severity. This information is significant for determining relative car driver and occupant protection ratings for specific models of car. Air bag deployment is simple for the police to determine at the accident scene.
- Foreign vehicles
  - Consider an explicit code for foreign vehicles.

## **5 Proposals for the deletion of under-used variables and values.**

- None have been identified so far. All are regarded as valuable by DTLR road safety division.

## **6 Proposal to formally adopt the collection of contributory factors.**

- A harmonised national collection system was first proposed in the 1997 review and supported by DTLR Road Safety Division and ACPO as a 'best practice' system. Details of this proposed system are described in the 1997 review document. The executive summary of the TRL report describing the proposed new collection system is appended to this paper.
- The county surveyors society and some local authorities hold strong reservations about the proposed collection form and also the possibility of legal complications arising from comparisons of accident causation between local authorities. The compromise solution was that national collection could proceed upon a voluntary basis and that the issue of whether this should become a 'STATS 19' requirement would be addressed in the 2002 review. This would be done in the light of the experience gained from the voluntary use, on a trial basis, of the proposed system.
- The proposed national collection system can provide a very large sample of causation analysis to support road safety publicity. At a local level the issue is whether local causation analysis from the harmonised national collection system, linked to STATS 19 information about vehicle, driver, and accident type and place, can effectively guide local police enforcement activity and local authority road accident prevention schemes. Some local authorities claim that this is not the case, and that existing local collection systems are more effective.
- The DTLR will assess the results of the causation factor analysis to be carried out by the Transport Research Laboratory (TRL).

## **7 Data linkage with health, crime and socio-economic statistics.**

- The 1997 review accepted the need for driver and casualty post-code information to enhance the potential for linking road accident data with health, crime and population statistics. The post-code information would also provide information about where casualties lived and could usefully distinguish 'locals' and 'non-locals'.
- Has any analysis or data linkage been done?
- How accurate is the post coding?

## **8 International perspective and commitments.**

- The road accident database for Great Britain is well known for its high quality and coverage. In Europe it offers a model of data collection based upon devolved responsibility rather than centralised bureaucracy. This model makes the collection system very responsive to local needs and road safety problems. The British data formally supports:-
  - The EU road accident database (CARE) - Council Decision (93/704/EC) : Implemented 1 April 1994. Under this agreement individual national data records are supplied to contribute to a Community road accident database.
  - The International Road Traffic and Accident Database (IRTAD) – An aggregated database managed by the OECD.
  - The Safety Rating Advisory Committee (SARAC)- a European Commission funded project in which British road accident data provides a key component for assessing the occupant protection performance of specific models of car, and also comparing results
  - with those produced by the European New Car Assessment Programme (EURONCAP).
- The Commission Recommendation on maximum permitted Blood Alcohol Content- COM (2000) 4397 was adopted on 17 January 2001. This included notice that the Commission would like to co-ordinate the use of alcohol related road accident records (breath test and blood test results) for analysis of drinking and driving at a European level. Drivers in most injury road accidents are tested for alcohol in the UK, but police testing levels vary in different police force areas. Evidential breath test levels are not recorded and, by omission, are not available for analysis. Blood test levels are confidential and are currently not provided to the EC. A European data requirement for alcohol test results may develop in the future.

## **9 Availability and presentation of national road accident statistics.**

- A range of statistical publications is produced annually to inform users of road accident data about statistical trends and road safety/road transport developments. These are mostly available on a Web site but accessibility and the range of analysis or data records available for users should be investigated.
- Sometimes casual users of data are not aware of what information is available, whether it has to be paid for or not, and the review could usefully consider how a web-site could improve guiding users to available information. It could also consider the most effective ways of getting figures to users. A scrutiny of the most appropriate information linked to topical road safety issues which could be placed on the internet would be a useful exercise.

## **10 Data protection.**

- The 1997 review took the view that STATS19 road accident records and post-code information were anonymous and that such information could be transferred to other users. The data protection act was interpreted as putting the legal responsibility for protection upon the holder or user of the data and this did not prohibit the supply of data to users subject to charges and contractual obligations concerning use.

- Following the 1997 review some local processing authorities questioned the legal implications of providing post-code data to DTLR in case it violated the data protection act.
- Also the ONS recently advised that according to the provisions in the data protection act their view was that post-code information, once in the DTLR STATS19 database, could only be supplied to DTLR organisations and to agents working for DTLR. (presumably this would include other government Departments like Health and the Home Office or this would greatly diminish the purpose of collecting this information for data matching purposes)
- Advice is being sought from the data protection registrar. Whatever the outcome, advice needs to be provided in the 2002 review to clarify the situation.

#### **11 Ownership, supply and charging arrangements for national and local road accident statistics.**

- The view of the last review was that the STATS19 national (GB) database was jointly managed and owned by SCRAS, but dissemination and charging was the responsibility of DTLR. The issue of who owned the revenue from national STATS19 sales was overcome by advising that monies would be eventually paid to the central exchequer.
- Guidelines for disseminating and charging for STATS19 data by DTLR and the Scottish Executive and the National Assembly for Wales were set out in the last review.
- Locally the nature of the relation between local processing authority and data users (usually a road contractor or authority) will vary considerably and contractual agreements are decided locally. It would be extremely difficult to offer guidelines at a local level. However we could revisit this sensitive subject with examples of how some local arrangements work. This might address the problem of the proliferation of local road authorities and contractors and their demands upon local, especially police, processors.

#### **12 Standard Formats for the supply of STATS19 data to DTLR/SE/NAW Implementation time for modifications to the STATS19 process**

- Currently, the only available format accepted is a "fixed column" ASCII flat file which contains a mixture of record types. There have been requests for the option to be made available to supply data in alternative formats which may have the benefit of being more easily produced from commonly used software.
- Any modifications to the data collection process normally require a lead time of one year to implement. The implications of the length of lead time for reporting and coding organisations could be considered.

### **7. The timetable for the review process**

- 7.1 The timetable for the main stages of the 2002 quality review of the stats19 injury road accident data collection system is set out in following table.

**Peter Wilding**  
Review Project Officer  
13 July 2001

## THE 2002 QUALITY REVIEW OF ROAD ACCIDENT INJURY STATISTICS

### Timetable

<ul style="list-style-type: none"> <li>• Set up Project Board/Contact ONS - June 2001</li> <li>• Set up SCRAS working group - appoint independent assessor - June 2001</li> <li>• Sort out police representation. ACPO. - June 2001</li> <li>• Update List of consultee safety organisations - June 2001</li> </ul>
<ul style="list-style-type: none"> <li>• Produce a scoping paper and consultation questionnaire 2001 to discuss with SCRAS Working group - First 2 weeks of July 2001</li> <li>• Consultation process organised - First 2 weeks of July 2001</li> <li>• Summary for SCRAS Newsletter - First 2 weeks of July 2001</li> <li>• Consultation information on DTLR web-site - First 2 weeks of July 2001</li> </ul>
Process responses from consultation and 2001 produce SCRAS paper. Assess review items. - Early September
<ul style="list-style-type: none"> <li>• Full SCRAS meeting to present the scope of the review and the detailed proposals arising from consultation - October 2001</li> <li>• First meeting of Working Group - October 2001</li> <li>➤ Examine consultation response</li> <li>➤ Develop scope of review</li> <li>➤ Organise Working Group meeting schedule</li> </ul>
<ul style="list-style-type: none"> <li>• Working Group to report Interim conclusions - Early March 2002</li> <li>• Consultation with ONS - Late March 2002</li> </ul>
Arrange a programme of Regional meetings to present Interim conclusions and obtain feedback - March to July 2002
Produce draft review report - August 2002
<ul style="list-style-type: none"> <li>• Full SCRAS meeting to finalise Review report and implementation date - September 2002</li> <li>• Report to ONS for approval - September 2002</li> </ul>
Report to Ministers - October 2002
Production of final bound reports and press notice - Early December
Implementation in January or April 2004

## List of Acronyms

<b>ABI</b>	- The Association of British Insurers
<b>ACPO</b>	- The Association of Chief Police Officers (England, Wales and Northern Ireland)
<b>ACPO(S)</b>	- The Association of Chief Police Officers (Scotland)
<b>AMA</b>	- The Association of Metropolitan Authorities
<b>ACC</b>	- The Association of County Councils
<b>COSLA</b>	- The Council of Scottish Local Authorities
<b>CSS</b>	- The County Surveyors Society
<b>CARE</b>	- The road accident data-base of the European Community
<b>DfT</b>	- Department for Transport
<b>DTLR</b>	- The Department of Transport, Local Government, and the Regions
<b>DoH</b>	- The Department of Health
<b>EC</b>	- The European Community
<b>EURONCAP</b>	- The European New Car Assessment Programme
<b>GPS</b>	- Global Positioning System
<b>HO</b>	- The Home Office
<b>HA</b>	- The Highways Authority
<b>IRTAD</b>	- The International Road Traffic Accident Data-base
<b>LPA</b>	- Local Processing Authority
<b>LAAU</b>	- The London Accident Analysis Unit
<b>NI</b>	- The Department of Regional Development (Northern Ireland)
<b>NAW</b>	- The National Assembly for Wales
<b>OECD</b>	- The Organisation for Economic Co-operation and Development.
<b>ONS</b>	- The Office of National Statistics
<b>RS</b>	- Road Safety Division (DTLR)
<b>RUC</b>	- The Royal Ulster Constabulary
<b>SARAC</b>	- The Safety Rating Advisory Committee
<b>SE</b>	- The Scottish Executive
<b>SCRAS</b>	- The Standing Committee on Road Accident Statistics
<b>TRL</b>	- The Transport Research Laboratory

**A NEW SYSTEM FOR RECORDING CONTRIBUTORY FACTORS IN ROAD ACCIDENTS**  
**By Dr J Broughton, Miss K A Markey and Superintendent D Rowe**

Unpublished TRL Project Report PR/SE//229/96

## EXECUTIVE SUMMARY

The present national system for collecting information about road accidents was established in 1949, and is still known as the STATS19 system after the standard reporting form. The data collected have proved invaluable in monitoring accident trends and developing new measures to improve road safety. One important reason for this is that accident data are collected in a consistent way in all parts of Great Britain, so local data can be brought together in a national database.

In addition to objective factors such as time of day and speed limit, the original system also collected 'contributory factors', i.e. the factors which the reporting officer considered had contributed to the causation of the accident. Subsequent doubts over the reliability of the factors being collected meant that collection of these data ceased to be a national requirement in 1959. Nevertheless, in 1994 a TRL survey of the 43 police forces in England and Wales found that over one half were still recording contributory factors, but the systems being used had diverged over time so that patterns of accident causation in different areas could not be compared.

The contributory factors summarise the events and influences which led directly to an accident. The information is inevitably subjective as it depends upon the investigator's 'reconstruction' of the circumstances leading up to the accident from the available evidence. The information can suggest possible interventions and remedial measures which could have prevented the individual accident, and measures for improving road safety can be developed by studying the factors for large numbers of accidents. The fact that many police forces continue to record contributory factors so long after the national requirement ended provides one indication of the local value of this information at a time when road safety has assumed greater prominence.

The information has been mainly used by the Local Authorities, for example in developing remedial measures at accident black spots and for road safety publicity. Its value would be greatly enhanced, however, if the factors could be recorded in a consistent way by all forces, and assembled into a database closely linked to the national STATS19 database. Accordingly, the Department of Transport commissioned the Transport Research Laboratory to develop a prototype system. This report describes the development of a system that could be used by the police. It also describes the trial of the scheme that was carried out by eight police forces for three months in the summer of 1996, and presents analyses of the data collected.

There were various objectives in developing the new system. It had to be simple to use yet sufficiently comprehensive to accommodate the great majority of road accidents within a standard set of codes. Many police officers attend only one or two accidents per year, so it should be self-explanatory and not require extensive training or documentation. Equally importantly, its design should encourage the collection of high quality data.

The following approach to accident investigation was adopted in order to optimise the overall quality of the data collected:

1. ascertain the critical failure or manoeuvre which led up to the accident (referred to as the Precipitating Factor) and record it using the appropriate code,
2. from the evidence available, identify the factors which contributed to this failure or manoeuvre (there may be more than one of these Contributory Factors) and record them using the appropriate codes.



Two lists were drawn up, one consisting of 15 Precipitating Factors and the other of 54 Contributory Factors. As the identification of Contributory Factors in an accident tends to be relatively subjective, depending upon the experience of the investigator and the strength of the evidence, investigators were asked to code each factor as either Definite, Probable or Possible.

The eight police forces which co-operated in the trial represented all parts of Great Britain and all types of roads: two forces had not been recording contributory factors routinely. The trial thus provided a rigorous test of the new system. TRL staff made a single visit to y each force to brief key personnel about the new system: these were then responsible for briefing the officers who would attend accidents during the trial. According to responses received from the participating police officers, few problems were encountered when using the new system. 2897 coding forms were returned to TRL, only 102 of these had not been completed satisfactorily.

The report presents various analyses of the contributory factors that had been recorded. In addition, the forms have been linked to the regular STATS19 reports for those accidents whose details had reached the national database by November 1996 (if in future a police force uses the system to record contributory factors routinely then the link would be made automatically in its accident database), and analyses of the linked data are also presented.

A system capable of recording contributory factors for every conceivable type of accident would be unmanageably large. In order to judge whether the new system provides a satisfactory compromise between completeness and ease-of use, investigating officers who were unable to choose an appropriate code were asked to enter 'other' and supply full details. Analysis of these details suggests that only a few minor adjustments to the factor lists are required. This 'other' facility also provided a means of recording valuable non-standard information, such as that two of the accidents resulted from suicide attempts, so the facility could be a useful feature of a future implementation of the new system.

The value of STATS19 accident information to Local Authorities and the Department of Transport in attempting to improve road safety has been widely recognised for many years, but its potential contribution to the effective management of traffic policing has received less attention. This report shows that the STATS19 information augmented by the contributory factors collected with the new system can be entered and stored by the police using the MAAP5 software mounted on a PC, and that it can be analysed to guide deployment of police resources in support of the National Road Policing Strategy adopted by the Association of Chief Police Officers of England, Wales and Northern Ireland (ACPO). This approach was adopted by the Cleveland Constabulary in January 1997 and represents a further test of the new system for recording contributory factors, but it is too early to evaluate the results achieved. In addition to the benefits to the police, the enhanced data will be useful to the Local Authorities for developing remedial measures.

**WHAT WENT WRONG (Precipitating Factors)**

<p><b>FAILURES OF DRIVER or RIDER</b></p> <p>1 Failed to stop (mandatory sign)</p> <p>2 Failed to give way</p> <p>3 Failed to avoid pedestrian (pedestrian not to blame)</p> <p>4 Failed to avoid vehicle or object in carriageway</p> <p>5 Failure to signal/misleading signal</p> <p>6 Loss of control of vehicle</p>	<p><b>MANOEUVRES</b></p> <p>9 Swerved to avoid object in carriageway</p> <p>10 Sudden Braking</p> <p>11 Poor turn/manoeuvre</p> <p>12 Poor overtaking</p> <p>13 Drove wrong way (eg 1-way street)</p> <p>14 Operating door carelessly</p>
<p><b>FAILURES OF PEDESTRIAN or PASSENGER</b></p> <p>7 Pedestrian entered carriageway without due care (driver/rider not to blame)</p> <p>8 Passenger fell in or near PSV</p>	<p>15 OTHER</p>
<b>WHY? (Causation Factors)</b>	
<p><b>PERSONAL DETAILS</b></p> <p>1 Impairment            alcohol</p> <p>2                            drugs</p> <p>3                            fatigue</p> <p>4                            illness</p> <p>5 Distraction            stress/emotional state of mind</p> <p>6                            physical in/on vehicle</p> <p>7                            physical outside vehicle</p> <p>8 Behaviour            panic</p> <p>9</p> <p>careless/thoughtless/reckless</p> <p>10                          nervous/uncertain</p> <p>11                          in a hurry</p>	<p><b>VEHICLE DEFECTS</b></p> <p>28 Tyres                wrong pressure</p> <p>29                          deflation before impact</p> <p>30                          worn/insufficient tread</p> <p>31 Defective lights or signals</p> <p>32 Defective brakes</p> <p>33 OTHER</p>
<p>12 Failure to judge other person's path or speed</p> <p>13 Disability</p> <p>14 Failed to look</p> <p>15 Looked but did not see</p> <p>16 Inattention</p> <p>17 Person hit wore dark or inconspicuous clothing</p> <p>18 OTHER</p>	<p><b>LOCAL CONDITIONS</b></p> <p>34 Site details        poor road surface</p> <p>35                          poor/no street lighting</p> <p>36                          inadequate signing</p> <p>37                          steep hill</p> <p>38                          narrow road</p> <p>39                          bend/winding road</p> <p>40                          roadworks</p> <p>41 Slippery road</p> <p>42 High winds</p> <p>43 Earlier accident</p> <p>44 OTHER</p>
<p><b>PEDESTRIAN DETAILS</b></p> <p>19 Crossed from behind parked vehicle etc</p> <p>20 Ignored lights at crossing</p>	<p><b>OBSCURATION</b></p> <p>45 View                windows obscured</p> <p>46                          glare from sun</p> <p>47                          glare from headlights</p>
<p><b>DRIVER DETAILS</b></p> <p>21 Excessive Speed</p> <p>22 Following too close</p>	<p>48 Surroundings    bend/winding road</p> <p>49                          stationary or parked vehicle</p> <p>50                          moving vehicle</p> <p>51                          buildings, fences, vegetation etc</p>
<p>23 Inexperience        of driving</p> <p>24                          of vehicle</p>	<p>52 Weather (eg mist or sleet)</p> <p>53 Failed to see pedestrian or vehicle in blind spot</p>
<p>25 Interaction or competition with other road users</p> <p>26 Aggressive driving</p> <p>27 Lack of judgement of own path</p>	<p><b>ANIMAL INVOLVEMENT</b></p> <p>54 Animal out of control</p>

Precipitating Factor		
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Vehicle or Casualty		
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Vehicle or Casualty Ref			
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Causation Factor 1		
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Confidence in CF 1		
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ANNEX B



PETER WILDING  
REVIEW PROJECT MANAGER  
TSR6

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13 JULY 2001

Dear Colleague,

#### THE 2002 QUALITY REVIEW OF ROAD ACCIDENT INJURY STATISTICS

The latest review of National Statistics on road accidents involving personal injury has started and the aim is to report recommendations to Ministers in October 2002. This review is being organised in accordance with the National Statistics Quality Assurance Programme Board guidance paper 'Commissioning a National Statistics Review'.

National road accident statistics are based upon data provided by the police using the 'STATS19' data collection system. The views of both established users of national road accident statistics and 'STATS19' data, and also the providers of 'STATS19' road accident data, will be an essential contribution to this review. I am writing to you to seek your views about the suitability of the current coverage of the STATS19 coding form, either as a user of the information and/or data provider. In addition I would like to know if you have any suggestions for change to the STATS 19 system which you believe would improve the analysis and monitoring of road accidents for policy or operational purposes, at a national, as well as a local level. Any views you have which will help us to improve national road accident statistics will also be welcome.

I attach a scoping paper for the review that sets out some of the topics that the DTLR will want to investigate. This is an evolutionary process and I hope this paper will help you form your own ideas. However the paper is not intended to be definitive and any additional ideas are very welcome and will be scrutinised by the review team.

I also attach a copy of the current STATS19 coding form to give you a guide to the current coverage of road accident data, together with simple survey forms to facilitate a concise response. One form is for data providers to complete, and the other for data users, but of course your organisation may complete both if that is appropriate. If you wish to provide fuller supplementary information on a separate sheet of paper this will be acceptable.



The Standing Committee on Road Accident Statistics, which represents the views of all parties involved in the collection process, will decide on what changes should be made to the collection process having considered the potential for national road accident and casualty reduction in relation to implementation costs. The Committee's recommendations will be put to the Minister for Road Safety for approval.

Your views will be considered by a working group which will report recommendations to the Standing Committee on Road Accidents next year. I will inform you of the conclusions of the review when recommendations are made public. As with the 1997 Quinquennial Review, the views expressed in this review are likely to be published in the final report. I will assume that you will be content for your response to be attributed to you or your organisation unless you indicate otherwise in your response.

If you would like to discuss any aspects of the review or the collection process before replying please do not hesitate to contact me.

The closing date for submissions (preferably by e-mail to the address below) is Friday 7 September, but it would be very helpful if you could reply earlier if possible. Electronic versions of the consultation documents can be obtained by contacting the e-mail address shown below. If you have a difficulty making this closing date and still wish to reply it would be useful if you contact me directly.

Yours sincerely

**Peter Wilding**

**DTLR  
Great Minster House  
Zone 2/14  
76, Marsham Street  
London SW1P 4DR  
TEL: 020 7944 4926**

**[Peter.Wilding@DTLR.gsi.gov.uk](mailto:Peter.Wilding@DTLR.gsi.gov.uk)**

**THE 2002 QUALITY REVIEW OF THE STATS19 INJURY ROAD ACCIDENT DATA COLLECTION SYSTEM**

**SURVEY FORM FOR DATA USERS TO COMPLETE**

**Organisation Name:**

**Name, address and position of respondent:**

**1. How much use do you make of road accident data?**

**Tick Box**

- a. Regularly throughout the year
- b. About once a year
- c. Every few years
- d. Never ( do not continue)

**2. How do you obtain STATS19 data?**

**Tick Box**

- a. From publications (eg Road Accidents Great Britain – The casualty report)
- b. From data requests directly to Government
- c. From the Economic and Social Research Council (ESRC)
- d. From the Internet (DTLR web-site)

e. From other holders of STATS19 information  
(please specify)

**3. Is the STATS19 data source essential for your work?**

**Tick Box**

- Yes
- No

4. Are you aware of other data sources which could be used in place of STATS19 for your work ?

Tick Box

Yes, please specify

No

5. Are there additional road accident data you would like to see collected in the STATS19 system? Comments concerning a proposed national collection system of contributory factors (referred to in the attached scoping paper) would be appropriate here.

  

6. Are there additional road accident analyses you would like to see published or placed on the DTLR web-site or other Government web-sites.

Tick Box

Yes, please specify

No

**THE 2002 QUALITY REVIEW OF THE STATS19 INJURY ROAD ACCIDENT DATA COLLECTION SYSTEM**

**SURVEY FORM FOR DATA PROVIDERS TO COMPLETE**

**Organisation Name:**

**Name, address and position of respondent:**

**1. DATA COVERAGE**

**A) If you feel that the coverage of STATS19 road accident data variables and values could be usefully amended please outline your suggestion:-**

**B) Is there any aspect of the current STATS 19 requirement and STATS 20 definitions which causes particular difficulties and could be clarified?**

**2. THE PROPOSED NATIONAL SYSTEM FOR COLLECTING CONTRIBUTORY FACTORS**

**A) Do you have any comments concerning the suitability of the proposed system for local road safety activity?**

**B) Are you in favour of adopting the proposed system?**  
Tick Box

Yes

No

**3. DATA TRANSMISSION**

**(A) Do current arrangements for the transmission of data cause any difficulties? If they do, please outline.**





CHIEF SUPERINTENDENT JEREMY MOORE  
POLICE LIAISON OFFICER

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LOCAL GOVERNMENT AND THE REGIONS  
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WEB SITE: [www.dtlr.gov.uk](http://www.dtlr.gov.uk)

13 JULY 2001

Dear Chief Constable,

### **The 2002 quality review of road accident injury statistics**

The latest review of National Statistics on road accidents involving personal injury has started and the aim is to report recommendations to Ministers in October 2002. This review is being organised in accordance with the National Statistics Quality Assurance Programme Board guidance paper 'Commissioning a National Statistics Review'.

I am writing to you to let you know that the review team will be consulting all those who are involved in the collection and provision of road accident data (referred to nationally as STATS19 road accident data). It will also consult all those who use STATS19 information and the broad range of published road accident statistics based upon this information.

The Department of Transport, Local Government and the Regions (DTLR) will be contacting directly all those police forces in England that act as a STATS19 local processor and data provider for the DTLR, and those police forces in Wales who provide data to the National Assembly for Wales. I attach copies of the consultation documents that will be sent to them.

I would like to ask you to pass on this information about consultation to any other Department or Division in your force that uses road accident data so that they can, if they wish, make their voice heard. The police involvement in the collection, and often use, of STATS19 data is critical for road safety and if there are any problems the review would like to hear about them.

Mr Ian Latimer, Assistant Chief Constable (Devon & Cornwall), Mr Brian Ladd (Essex Police) and myself will represent the police service during this review. Should you wish to pass on information other than by using the questionnaire or contacting Peter Wilding then please contact one of us.

If replies could be made directly (by e-mail preferably) to Mr Peter Wilding he will ensure that they are taken up in the review process. If you wish to contact him at the e-mail address shown below he will provide copies electronically for you. His full postal address is:



**Peter Wilding, Review Project Officer, DTLR, Great Minster House, Zone 2/14, 76,  
Marsham Street, London SW1P 4DR**

**TEL: 020 7944 4926**

**FAX: 020 7944 2164**

**[Peter.Wilding@DTLR.gsi.gov.uk](mailto:Peter.Wilding@DTLR.gsi.gov.uk)**

If you have a difficulty making the closing date of Friday 7 September and still wish to make a reply it would be useful if you contacted Peter Wilding directly.

Yours sincerely

Jeremy Moore  
Chief Superintendent  
National Police Liaison Officer

## **ANNEX D Summary of consultation response**

The Response is divided into seven sections :

- (A) Police Forces (England and Wales)
- (B) Road Safety Organisations (England and Wales)
- (C) Policy Divisions (DfT)
- (D) Scottish Executive (Comments included in LGRAS record Pages)
- (E) Scottish Police Forces
- (F) Welsh Local Authorities and associated bodies
- (G) English Local Authorities

(A)

**2002 REVIEW RESPONDENTS : POLICE FORCES (ENGLAND AND WALES)**

1. Lancashire Constabulary
2. City of London Police
3. Cumbria Constabulary
4. Cleveland Police
5. Chief Constable Pauline Claire (Lancashire Constabulary)
6. Wiltshire Constabulary (Data User)
7. Humberside Police (Traffic Accident System Administrator)
8. North Wales Police
9. Bedfordshire Police
10. Hampshire Police
11. Wiltshire Constabulary (Data Provider)
12. Greater Manchester Police
13. Lancashire Constabulary (Road Policing Unit)
14. Lincolnshire Road Safety Partnership (Incorporating Lincolnshire Police)
15. Gwent Constabulary
16. West Mercia Constabulary
17. North Yorkshire Police (Central)
18. Suffolk Police
19. Thames Valley Police
20. North Yorkshire Police (Eastern and Western)
21. Sussex police
22. Merseyside Police
23. Surrey Police
24. Staffordshire Police
25. Leicestershire Constabulary
26. Durham Constabulary
27. Northumbria Police
28. Norfolk Police
29. Cheshire Constabulary
30. Hertfordshire Constabulary
31. Kent County Constabulary
32. Derbyshire Constabulary (incorporating comments of the Derbyshire review team)
33. Metropolitan Police

## **SUMMARY OF RESPONSE FROM LOCAL POLICE AUTHORITIES CONSULTED BY DTLR**

### **1. Lancashire Constabulary**

- The layout of the proposed national collection system of contributory factors obscures 'excessive speed' as a significant causation factor. Moving 'excessive speed' to the top of the list might give it more prominence. There are too many factors on the form which may obscure the selection of the most significant factors causing road accidents. Plan to adopt the system but feel that it should be simplified.
- Do not favour any additions to data collection requirements. Current requirements are complex enough for inexperienced police officers.
- Report confusion because of the different reporting requirements of the road traffic act and the national STATS19 system.

### **2. City of London Police**

- Support the adoption of the proposed national collection system of contributory factors. The system is regarded to be essential for providing valuable intelligence for allocating enforcement resources to pursue both national and local casualty reduction targets.
- Take the view that the current reporting and computerised coding system is very labour intensive with considerable duplication at reporting stations. The City of London Police would like to see a common national system used by all police forces.

### **3. Cumbria Constabulary**

- The constabulary are awaiting the introduction of a new accident reporting system and have yet to introduce the new STATS 19 forms resulting from the 1997 review. Subsequently comments concerning the 2002 review are limited.
- Support the adoption of the proposed national collection system of contributory factors.

### **4. Cleveland Police**

- Currently using the proposed national collection system of contributory factors and support its adoption nationally. Think that training is essential to assist correct identification of the blameworthy vehicle.
- Suggested clarification that driver age of parked vehicles should be recorded if available.
- Suggested clarification that for variable 2.10 'Junction Location of vehicle' that value 4 'Did not impact' only applies when the involved vehicle was at a junction.

### **5. Chief Constable Pauline Clare (Lancashire Constabulary)**

- Proposal to harmonise the classification of serious injuries in road accidents across all the emergency services to improve the data sharing capacity between them.
- In particular suggested that the Trauma Audit and Research Network (TARN) offers a classification model of serious injury, based upon a point system from 1 to 75. [This is a point system known as the injury severity score (ISS) based upon the concept of adding together the squares of the highest abbreviated injury scale (AIS) scores in three pre-

determined regions of the body. There are up to 1200 specific injury types which can be given an AIS score and the maximum AIS injury score is 5. Hence the maximum ISS score is consequently 75. A casualty who is expected to die is automatically given a score of 75. This classification is based upon clinical assessment. It could not be operated at the road side by reporting police officers and the follow up burden by clerical teams with accident and emergency departments could be very onerous.]

- If practicable, a more detailed classification of injury, which did not undermine existing definitions of serious and slight injury used for monitoring casualty reduction to 2010, would offer the potential for calculating more precise estimates of the cost of accidents, and a better allocation of resources devoted to injury reduction in specific types of road accidents. From a strategic policy perspective any improvements to the current simplistic definitions of injury severity would offer a major benefit. The difficulty is finding a better and more detailed classification system which can easily be used by reporting police officers or clerical teams. [In the past the identification of hospitalised patients has been rejected because it is not easily identified by the reporting officer or clerical coding teams and presents too much of a burden]
- [The possibility of matching STATS 19 casualty records with accident and emergency records needs to be investigated to see if a reliable injury profile of STATS19 injured road accident victims can be established].

## 6. Wiltshire Constabulary (Data User)

- Support the view that identifying hospital admission is too onerous for reporting officers.
- Wiltshire have already adopted the proposed national collection system of contributory factors. Wiltshire strongly support the need for a national harmonised system for collecting contributory factors with common codes and standard guidelines. However there is real concern that the codes currently used in the proposed national system could be improved. The suggestion from Wiltshire is as follows:
  - **Precipitating Factors**  
Failure to comply with road markings should be added.
  - **Causation Factors**  
Add
    - Racing on the highway.
    - Mobile phone use.
    - Reference to 'reckless' driver behaviour (eg code 9) should be changed to 'dangerous' driver behaviour to align with current legislation.
    - Weather (code 52) is not specific enough and should be broken down into detailed categories.

If the precipitating factor 'poor overtaking' (code 12) is selected a causation factor of 'insufficient view for circumstances' should be available as an option.

- Overloaded vehicle.
  - Code 21 'Excessive speed' is insufficient. An additional code is required to record 'Inappropriate Speed'.
  - Foreign drivers on the wrong side of the road or misusing junctions.
- Take the view that the STATS 19 requirement should also include:
    - Mobile phone use.
    - Seat belt and child restraint use.
    - Air bag deployment.
    - Foreign vehicles.

## 7. Humberside Police (Traffic Accident System Administrator)

- Take the view that subjective contributory factors data are only based upon an opinion and are questionable. Reported that when Humberside police incorporated their collection in 1999 that many police officers were concerned that their opinions would be questioned in Coroner or Court proceedings and were subsequently reluctant to complete the form.
- Suggest that 'inappropriate speed' would be a useful addition to the proposed national form.
- Highlight a potential weakness in the national collection form. If a pedestrian runs in to the path of a vehicle and is injured in the subsequent crash, then the fact that the pedestrian has been injured should provide corroborative evidence to select code 7 'Pedestrian entered carriageway without due care (driver/rider not to blame)'. If the pedestrian is not injured, the evidence concerning pedestrian blameworthiness is harder to substantiate, which may lead to the selection of other codes (eg 4,6,9,10) which erroneously would put the blame on the driver.
- Very detailed comments were provided in response to the consultation paper. To summarise, the main comments were:
  - **Evaluation of the 1997 review changes**
    - **The costs arising from modifications to existing variables were acceptable, but it was unclear if the new variables adopted were yet producing reliable information. In particular, there had been a difficulty with reporting officers correctly interpreting 'place accident reported'. [Although the STATS 20 document makes it clear that code 1 'at scene' means that the officer based his report upon information gleaned by attending the scene of the accident, this document was not always available to reporting officers. It is acknowledged that some officers may attend the accident scene the day after the accident but in most cases it should be the same day. Issue 2 of the SCRAS newsletter makes it clear that code 1 'at scene' should be used when the officer attended the accident and not where the reporting officer completed the accident report form]. Humberside police suggest that re-coding 'elsewhere' to 'Over the Counter', and 'at scene' to 'Scene attended whilst one or more of the parties involved were still present' would be clearer. However, the latter would still not cope with the situation where a reporting officer attended the scene the day after the accident. It is acknowledged that there would also be coding difficulties in single vehicle accidents where the driver had been removed before the police attended on the day of the accident.**
    - **Post-code data had not been used so far.**
    - **The STATS 19 reporting requirement is now very clear and the 'Memo Card' was distributed with pay slips.**
  - **Current reporting concerns**
    - **Most problems arise from completing 'over the counter' accidents, mostly when a non-injury accident changes to an injury accident. These are mostly slight injury accidents and result in an inordinate amount of time in trying to complete the STATS19 record.**
    - **Humberside recommend the local report form developed by Middlesex University as a positive step towards harmonising the local road accident reporting process.**

- Suggest that moving to financial year reporting would push file closure into the main holiday period and would reduce timeliness of data submission.
- Suggest that a local STATS 19 database combined with GIS information would resolve many grid-referencing problems

➤ **Severity Definition**

Suggest that it is difficult to expand upon current severity definitions unless there is the possibility of reliable data linkage between police and health records. A common incident reference number used by the emergency services would provide a good starting point.

➤ **Proposals for new variables**

- Recognises the difficulty of defining 'work-related' accidents.
- Damage only accidents are for local agreement.
- Do not support the case for including mobile phones – too difficult to determine without corroborative evidence.
- Do not agree that there is necessarily a link between driver experience and the length of time that a licence has been held for.
- Take the view that the identification of seat belt use in many accidents is too difficult. But air-bag deployment is a possibility.

➤ **Proposals for deleting variables**

All current variables and values are used. There is no scope for deletion.

➤ **Data Linkage**

Take the view that the use of post-code data is limited and that the first part of the code is sufficient to determine whether a casualty is 'local' or not. A study for North Lincolnshire council showed that the majority of casualties were in accidents in which the driver was 'local', reinforcing the need for local road safety campaigns.

➤ **Data Protection**

Confirm the need for clarification concerning accident data and post code data especially.

**8. North Wales Police**

- Support the adoption of the proposed national collection system of contributory factors, but would like to see the codable factors modified. The information is currently collected locally and considered to be very useful by both police and local authority.
- Suggest that it would be useful to assess the effect of the introduction of the proposed cost recovery/hypothecation scheme upon casualty reduction.
- Take the view that some of the variables outlined in the consultation paper in sections 6.3 and 6.4, which could be considered for inclusion in STATS19, would present an unacceptable collection burden upon reporting police officers.
- Currently collect 'seat belt usage' and 'stolen vehicle' information locally.
- Report that it is not possible to record accurate grid references for accidents reported at police stations by visitors to North Wales.

**9. Bedfordshire Police**

- Suggest the re-introduction of seat belt usage.
- Take the view that the identification of school child casualties after having alighted from a school bus could support the selection and monitoring of bus pick up and set-down points.



- Suggest that variable 1.20a (Crossings Human control), Code 0, should be reworded to 'No pedestrian crossing facility with human control within 50 metres'.
- Take the view that most police officers are unaware of the different reporting requirements of the Road Traffic Act and STATS19, and that an accident report is only completed if it complies with the requirements of the road traffic act which provides the basis for completing STATS19 information. Suggest that the 'memo card' should receive greater publicity.

**10. Hampshire Police**

- Supports the addition of 'seat belt wearing' and 'mobile phone use' to the STATS19 requirement.
- Have adopted the proposed national system for collecting contributory factors.

**11. Wiltshire Constabulary (Data provider)**

- Suggest the inclusion of a contributory factor for 'distraction' and 'mobile phone use' in the proposed national collection system.

**12. Greater Manchester Police**

- Take the view that it is difficult enough to provide accurate information for the current STATS19 requirement and that there should be no addition to the requirement. In their view there should be a reduction in the number of variables collected.
- Have already adopted the national collection system.
- Report that contributory factors are not being collected if the accident was not attended by a police officer.
- Support the view that there should be greater disaggregation of 'injury severity'.
- State that it would be preferable to retain calendar year reporting of road accident data rather than move to a financial year.

**13. Lancashire Constabulary : Road Policing Unit**

- Confirm persistent confusion concerning the reporting of variable 1.26 'Place accident reported'.
- Point out that once reported an injury accident has to be recorded in their accident recording system within 3 days, and that injury severity has to be determined within this time span.
- Suggest that sufficient details should be recorded of damage only accidents to accommodate further enquiries for the completion of a STATS19 report should one of the parties involved report an injury within 30 days.
- Take the view that it is difficult to conclude whether mobile phone use is a contributory factor to an accident and does not support its inclusion.
- Do not support the addition of 'air bag' deployment to the STATS19 requirement, since deployment would only be recorded in injury accidents and would not include accident situations where the air bag had deployed and prevented injury. [In fact statistical evaluations of occupant injury risk in models of car, in injury road accidents, in the UK,

are made upon the basis of personal injury road accident data. These also exclude damage only accidents where very safe cars can offer a relatively higher degree of protection to their occupants and the occupants of the other cars they crash with. Air bags contribute towards occupant protection, and the exclusion of damage only accidents (in which the air bag was deployed) from statistical analysis presents a wider problem for evaluating relative car safety ]

**14. Lincolnshire Road Safety Partnership (Incorporating Lincolnshire police)**

- Propose that variable 2.9b 'Vehicle location at time of accident' should be augmented with an additional code for 'shared footway and cycleway' since there is an increase in the use of this type of facility.
- Support the need for a national collection system for contributory factors, but report that they would wish to retain their local recording system of contributory factors for at least five more years to facilitate the formulation of a viable reference database.
- Report that their current local contributory factors collection system is used extensively to help identify the need for local safety schemes. If a national collection system was adopted it would have to run in tandem with their current local system for a number of years in order to accumulate sufficient data for the monitoring of existing sites.
- Suggest that to be acceptable to local safety authorities, that the proposed national collection system of contributory factors would need to be as comprehensive as current local collection systems.
- Report that their local system for collecting contributory factors is more comprehensive than the proposed national system and that this additional detail should be incorporated in the national system.

**15. Gwent Constabulary**

- Identify a need for training to help reporting officers complete the STATS19 reporting requirement. Report that some officers find it difficult to complete a report form.
- Do not support the adoption of the proposed national collection system of contributory factors unless there is sufficient training.

**16. West Mercia Constabulary**

- Adopted the national collection system for contributory factors in 1999. Report that the precipitating and contributory factors are limited in their view. The factors were not found to be as flexible as those used in their previous local collection system. As an example, code 20 in the national form 'ignored lights at crossing' is only applicable to pedestrians and is not specifically available as a failure of drivers or riders which it was in the prior local collection system.
- Report that the national system only allows the identification of one vehicle which may be at fault, when in some instances it is clear that there is more than one vehicle at fault. Furthermore, in some cases there will be contributory factors which are appropriate but are not related to the identified vehicle at fault, which causes some difficulty since in the national system all contributory factors are associated with the identified precipitating factor.
- Recommend that 'seat belt wearing' should be re-introduced into the STATS19 requirement.
- State that when a vehicle leaves the carriageway (2.13) and rebounds, by implication it must hit an object (2.14). But in some cases the vehicle may simply mount a verge and

then rebound on to the carriageway without colliding with an object and that this should be reflected in the coding.

- State that there is no code for a vehicle parked 'off the carriageway' which is hit by another vehicle.

**17. North Yorkshire Police (Central)**

- Report that many reporting officers are unaware of the use made of the STATS19 records and that the quality of reported data is highly variable.
- Take the view that the proposed national collection system of contributory factors is too complicated and militates against accurate collection. Suggest that just a short list of eight key contributory factors would be preferable. The factors should be:

Excess speed, Inappropriate speed, Mechanical defect, Alcohol, Illegal drugs, Prescribed drugs, Weather conditions, Sleep.

**18. Suffolk Police**

- Support the adoption of the proposed national collection system of contributory factors as a STATS19 requirement. Suggest that there should be an explicit contributory factor for obscuration due to 'vegetation or hedgerows'.
- Suggest that collisions within a prescribed distance of speed enforcement cameras should be included to assist in their evaluation and the fines hypothecation process.

**19. Thames Valley Police**

- Report concern that if an accident record is personally identifiable by post code or VRM, and contributory factors are completed on the basis of the reporting officers subjective opinion and possibly incomplete facts, whether the reporting officer could be called upon to justify his decision in a court of law. It is unclear how far the data protection act would allow a reporting police officer to make such a report if it is transferable.

**20. North Yorkshire Police (Eastern and Western)**

- Support the proposed national collection of contributory factors. Suggest that inappropriate speed, and sleep related accidents, should be included as a contributory factor.
- Suggest that foreign drivers should be included as a STATS19 requirement.

**21. Sussex Police**

- Suggest that 'inappropriate speeding' should be included as a contributory factor in the national collection form.
- Suggest the inclusion of 'journey purpose', seat belt usage' and 'use of child seats' as a STATS19 requirement.

**22. Merseyside Police**

- Report that the force is contemplating reducing the information recorded for STATS19 purposes for road traffic accidents reported at police stations. These are mostly slight injury accidents reported 'over the counter' and account for about 35% of recorded

STATS19 accidents in Merseyside. Their experience is that it is not possible to provide reliable information concerning location and the details of the other vehicle or casualties involved. In their view trying to complete contributory factor information in these circumstances is meaningless. The fact that the data protection act stipulates that data held should be accurate and relevant provides a strong argument for reducing the STATS19 requirement in these circumstances.

- Take the view that the current STATS19 requirement is already demanding enough.
- Report that there is still some confusion concerning the different reporting requirements of STATS19 and the Road Traffic Act which is evident in the treatment of single cycle accidents. In addition, there is still a problem with the interpretation of 1.26 'place accident reported' and suggest a re-wording to 'Was the scene attended'.
- Do not support the re-introduction of seat belt use into the STATS19 requirement.
- Favour a move to accounting for road accident statistics on a financial year basis to harmonise with other reports and returns required by government which are mostly required on a financial year basis.
- Currently use a local collection system of contributory factors and are not convinced that the proposed national system will be an improvement.

**23. Surrey Police**

- Emphasise that changes to the STATS19 reporting requirement require changes to police accident reporting books and computer software.
- Report that 'Give way sign or markings, - value 4 in 1.17 'Junction control' causes confusion.
- Support the proposed national collection scheme for contributory factors.

**24. Staffordshire Police**

- Report that the primary use of STATS19 data, after it has been collated by the local authority, is to locate new sites for speed safety cameras. The data is also used to support police road safety initiatives.
- Support the proposed national collection scheme for contributory factors.

**25. Leicestershire Constabulary**

- Report that the STATS19 reporting requirement is clear but are concerned that it is not adhered to. 'Memo Cards' were provided to every police officer following the 1997 review.
- Confirm concern about collecting contributory factor information for accidents reported 'over the counter' since reporting parties are not liable to admit that they were at fault for an accident.
- Report that there is no difficulty over the interpretation of variable 1.26 'Place accident reported'.
- Suggest that 'mobile phone use', 'seat belt use' and 'airbag deployment' and 'foreign vehicles' would be useful additions to the STATS19 requirement. However do not support the inclusion of 'work related accidents' and 'school children alighting from buses'.

- Take the view that current definitions of severity of injury are confusing because of the very wide range of severity covered in the broad severity categories. In particular, the serious injury category ranges from death after 30 days to a broken finger.
- Insist that training is an essential requirement for the introduction of the proposed national collection form for contributory factors and furthermore that training should be available to officers concerning the STATS19 requirement. Otherwise support the proposed system.
- Favour a facility for reporting officers to directly input accident details rather than completing forms by hand.

## **26. Durham Constabulary**

- Suggest that 'road rage', 'stolen vehicle', 'mobile phone use', 'seat belt use', 'child restraint use', 'air bag deployment' and 'regular user of the road where the accident occurred' should be added to the STATS19 requirement. Would not support the inclusion of the driving licence number which is problematic for reporting officers..
- Propose a definition of 'jack-knifed' in variable 2.11 'Skidding and Overturning'
- Wonder if the concept of 'limited vehicle access' can be further clarified perhaps by reference to signing or physical barriers.
- Consider that 'hire-cars' should be coded as 'taxis' and not 'cars'.
- Durham collect contributory factors according to their local scheme, and support the concept of a national collection system. However there are concerns relating to the cost of implementing the national contributory factors scheme.
- Report that changes following the 1997 review were acceptable and that new information generated from the new variables 'Place accident reported' and 'post code' is reliable and useful.
- Report that the 'Memo cards' were not used in Durham because of a potential conflict with their local requirement to also record non-injury accidents.
- Report a slight increase in the proportion of slight injury accidents since the last review – mainly due to increased civil litigation.
- Do not support the idea of moving to a reduced reporting requirement for 'over the counter' accidents.
- Report that GPS devices will be available in October 2003 and that the cost will be met from the force budget.
- Consider that any changes to current casualty severity definitions could prove burdensome for reporting officers.

## **27. Northumbria Police**

- Consider that a reduced reporting requirement for 'over the counter' accidents could lead to confusion.
- Monitoring hospital admissions to improve severity of injury definition would be too onerous.

- Take the view that collecting information concerning mobile phone use and driver experience would be too difficult. Support the collection of contributory factor information but emphasise the need for a user friendly system.
- Information concerning seat belt and child restraint use is already collected.

**28. Norfolk Constabulary**

- Take the view that training is essential to successfully implement the proposed national system of contributory factors. Supports the adoption of the proposed system.
- Report the need to clarify definitions of variable 1.25 'Place accident reported' and casualty severity.

**29. Cheshire Constabulary**

- Supports the proposed national collection system for contributory factors.
- Take the view that the current coverage of the STATS19 requirement is sufficient, but would support the development of a national reporting form which would enable a clearer definition and interpretation of the STATS19 requirement.

**30. Hertfordshire Constabulary**

- Favours the replacement of codes on local reporting forms with a tick box system which would facilitate scanning and save clerical time. Would like to see more investigation into the potential for using technology to speed up the reporting process by application of GPS and direct data inputting with palm readers.
- Supports the adoption of the proposed national system for collecting contributory factors but takes the view that it requires simplification.

**31. Kent County Constabulary**

- Support the adoption of the proposed national collection system for contributory factors as long as it can be demonstrated to produce meaningful data.

**32. Derbyshire Constabulary (incorporating comments of the Derbyshire review team)**

- Take the view that the term 'accident' is inappropriate and should be replaced by 'collision' to reinforce the fact that most accidents are avoidable. [ In the context of the STATS19 requirement the term accident rather than collision is used to reinforce the reporting requirement that single cycle accidents where there was not a collision with another vehicle should be included].
- Suggest that there is still confusion concerning variable 1.26 'place accident reported' and that further clarification is required.
- Report that severity of injury definitions cause confusion because definitions used to classify injury arising from criminal assaults are different. In addition it is pointed out that the definition of 'road ' in the Road Traffic Act' has been expanded to 'road or other public place' (with effect from April 2000) – this further exacerbates the reporting confusion arising from the STATS19 interpretation of 'public road'.
- Reports that the 'memo card' was not used in Derbyshire because it was felt it would cause even more confusion.

- Take the view that a reduced reporting requirement for accidents reported 'over the counter' would create additional reporting problems.
- Report that a new Force radio system will provide a facility for improving grid referencing.
- Take the view that a standardised local report form will only be brought forward if it becomes a statutory requirement.
- Take the view that road accident data should be reported and accounted for on a financial year basis in line with most other police and local authority reporting requirements.
- Suggest that the STATS19 definition of severity of injury is the most appropriate terminology for estimating injury in road accidents, and is preferable to the DoH definition of serious injury which is more appropriate to measuring health service costs.
- Suggest that more research should be undertaken to evaluate the practicality of including a variable for work related accidents. Also take the view that 'school child injury after having alighted from a bus', mobile phone use' and 'seat belt use' could not be collected accurately. In addition did not support the case for reporting 'air bag deployment' nor an explicit code for foreign vehicles.
- Take the view that the driving licence number does not provide a good guide to driving experience.
- Take the view that reporting of the text description is essential for local authority work in locating accidents and that GPS cannot provide exact locations (eg at a junction). A national requirement to report text description would help the supply of information to local authorities.
- Have adopted the proposed national collection system but are concerned about the quality of data being collected. In particular it is felt that the current system underestimates the influence of speed in accidents and suggests that allowance needs to be made for inappropriate speed, and that the coding frame only caters for accidents where there is only one road user 'at fault'. The allocation of blame to road users is also a matter of concern for reporting police officers. Otherwise supports the adoption of the proposed system.
- Reports the need for clear guidance concerning data protection. Research is being hampered by the current requirement to protect individual identities.

### **33. Metropolitan Police**

- Supplied an up-dated copy of a report produced by the Performance Information Bureau previously submitted to ACPO traffic committee commenting on the proposed national collection system of contributory factors. The Metropolitan Police routinely collect contributory factor information from their own local system. The Bureau is a user of the data as well as being responsible for the collation and input of personal injury road accident data on behalf of the Metropolitan Police, The City of London Police and the Royal Parks Constabulary.
- The Bureau report makes the following points:
  - The view of London Local Authorities is that the proposed national scheme will not meet their demands nor adequately replace the existing local collection system.
  - London Boroughs are concerned about the loss of information if the proposed national system is adopted at the expense of the existing local system, and that the

greater level of subjectivity of the factors in the proposed national system would undermine credibility.

- In their view the proposed system is far more complex than their local system and that only officers at the scene of the accident would be able to report the data required. Currently, Bureau staff interpret and code causation information supplied in officers Collision Report Books, which enhances accuracy and consistency and relieves police officers of this duty. Adoption of the proposed system would necessarily transfer the reporting duty back to police officers which would cause operational difficulties.
- Reports that the majority of injury accidents are attended by borough police rather than traffic police and that they would struggle to provide a meaningful report if the more complex national collection system were adopted.
- Reports that over 30% of injury accidents are reported retrospectively over the counter at borough police stations often far removed from the accident location. The borough station reception officer will have little appreciation of the statistical requirements and it is unlikely that the proposed national collection form could be completed satisfactorily in these circumstances.
- There are some factors in the proposed national collection form which are highly subjective (mainly relating to driver behaviour) and can only be completed on the basis of witness interpretation. There is concern that the requirement to allocate blame to road users can create difficulties for completion because officers may be reluctant to defend their subjective interpretation of events in court. There are also some factors which are too similar (eg 'inattention' and 'failed to see') which may cause difficulties for completion.
- The Bureau concludes that the proposed national collection system would impose unacceptable costs and data loss if adopted in London at the expense of the existing local collection system. The Metropolitan Police Area accounts for about 15% of national road traffic accidents.



**(B)**

**2002 REVIEW RESPONDENTS : ROAD SAFETY ORGANISATIONS (ENGLAND AND WALES)**

- 1. The British Horse Society**
- 2. European Secure Vehicle Alliance**
- 3. Institute of Road Safety Officers (IRSO)**
- 4. Roadpeace**
- 5. Mr Roland Graham**
- 6. Society of Motor Manufacturers and Traders**
- 7. Learn and Live**
- 8. Middlesex University**
- 9. Transport Research Laboratory**
- 10. Huddersfield University**
- 11. Cyclists' Touring Club**
- 12. Rita Taylor (Roadpeace Trustee)**
- 13. Slower Speeds Initiative**
- 14. The Superintendents Association (England and Wales)**
- 15. Sustrans (and Cymru)**
- 16. Transport 2000 and the Pedestrians Association**
- 17. Parliamentary Advisory Council for Transport Safety (PACTS)**
- 18. The Royal Society for the Prevention of Accidents**
- 19. Brake**
- 20. Dr Colin Cryer (Centre for Health Services Studies, University of Kent)**
- 21. Institute of Advanced Motorists**

## **SUMMARY OF RESPONSE FROM ROAD SAFETY ORGANISATIONS CONSULTED BY DTLR**

### **1. The British Horse Society**

- All accidents involving horses should be reported, and not just those accidents involving human injury. This would expand coverage to include damage only accidents and accidents in which only the horse was injured.
- Include unriden horses as a specific 'Carriageway Hazard' in variable 1.25. to assist guidance concerning secure fencing of paddocks and fastening of gates.
- Include unriden horses as a specific data value in variable 2.12 (Hit object in Carriageway).
- Claim that some police forces do not record personal injury road accidents involving horses despite this being a STATS19 requirement.
- Claim that some police forces do not record personal injury road accidents involving horses which are reported at the police station after the accident has occurred.

### **2. European Secure Vehicle Alliance**

- Point out that The Crime and Disorder act (1997) and the development of community safety partnerships implicitly support the investigation of the link between road accidents and vehicle related crime and disorder.
- In this context it is suggested that the STATS 19 requirement should be expanded to identify criminal or illegal activity of drivers. In particular, excessive speeding can be identified in the proposed national system for contributory factors and is already collected in some local collection systems. Stolen vehicles could be included in the STATS19 requirement, especially as police forces will increasingly have access to on –line information concerning stolen vehicles.

### **3. Institute of Road Safety Officers (IRSO)**

- Would like 1.22 'Weather' to include values to distinguish 'light rain' from 'heavy rain'. It is argued that this would provide information for assessing the visibility of road signs and markings in different conditions and would help determine whether a vehicle was travelling at an inappropriate speed for the conditions. [However the speed of the vehicle at the time of the accident is not collected in the STATS19 requirement]
- Suggest that 'ethnic origin' and 'understanding of English' should be collected for casualties in road crashes
- Welcomes the inclusion of 'ridden horse' to the vehicle record following the 1997 review and would like to see greater use of GPS for locating individual accidents.

### **4. Roadpeace**

- Prefer the term 'collision' to be used instead of 'accident'. In their view the term accident can give the connotation of an unavoidable incident.

- Suggest that fatalities should not be restricted to 'death within 30 days of the accident'. [The 30 day rule is applied in line with the agreement to the 1968 United Nation's Vienna convention which attempted to increase the amount of time which reporting agencies in signatory states allowed before determining death or severity of injury. This is merely a pragmatic arrangement which reflects the amount of time which reporting agencies are prepared to spend determining severity of injury]
- Point out that the 1998 Road Traffic (NHS Charges) act which allows hospitals to recoup treatment costs of road casualties from insurance companies will provide a source of data on road casualty in-patients.
- Take the view that greater emphasis should be given to under-reporting and under-recording in published statistics.
- Prefer to see casualty targets and statistics used for monitoring based upon hospital records. Prefer to see injury classification determined at hospital and not at the scene of the accident by police officers.
- Propose that the STATS19 reporting requirement for fatal and seriously injured casualties should be augmented with an additional form to collect information upon 'estimated speed', and whether the driver was charged, prosecuted and convicted.
- Take the view that contributory factors are better determined after an accident investigation. Furthermore the current coding frame used in the national collection system is most likely to under-estimate the influence of speed in road accidents as only 'excessive speed' is available as a codable factor
- Are concerned that not enough training is available to assist police officers or reporting units to complete contributory factor information reliably. In particular, the wording of the coding factor for 'pedestrian failure' in the national collection form for contributory factors is not appropriate and may prejudice the allocation of blame in a road accident towards pedestrians rather than motorised drivers and riders. Pedestrians legally are not required to exercise 'due care', as stated on the form, but only 'reasonable care for their own safety'. However, a driver is required to exercise 'due care' because they have a licensed responsibility for a vehicle, but a pedestrian may not be able to exercise due care because of 'age' or 'impairment'. Roadpeace point out that in some European Member States liability laws have been adopted which favour vulnerable road users and suggest that reporting police officers should be familiar with this issue when deciding upon blameworthiness for drivers and pedestrians in road accidents.
- Suggest that 'mobile phone use', 'time of police arrival at accident scene', 'breathalyser reading for evidential alcohol tests', 'drug impairment results', 'eyesight checks' and 'dangerous vehicle loading' should be included as a STATS19 requirement.

## 5. Mr Roland Graham

- On the basis of research work undertaken for an MSc project:
  - Points out that if accurate grid references could be supplied by GPS then the reporting police officer would not need to report on variables 1.12 to 1.15, 1.18 and 1.19, which could be completed from GIS information or expert knowledge accumulated in coding sections.
  - For variables 1.16 and 1.20b, suggests the definitional distances should be reduced to 10 metres. Also distance from the kerb would be useful casualty information for both cyclists and pedestrians.

- Supports the case for more disaggregation of severity of injury.
- Takes the view that a pedestrian breath test would be very beneficial for researchers.

## **6. Society of Motor Manufacturers and Traders**

- Highlights the lack of information collected concerning the type of trailers in the STATS 19 requirement and proposes the collection of the trailer serial number
- Suggests that the collection of information concerning seat belt usage and child restraint use would be beneficial. However SMMT take the view that information about air bag deployment could be open to misinterpretation but submitted responses both for and against including air bag deployment in STATS19.

## **7. Learn and Live**

- Supports the inclusion of the driving licence number in the STATS19 requirement to provide directly information on age and licence status.
- Would like to see more timely analysis of the accident involvement of newly qualified drivers compared to other drivers.

## **8. Middlesex University**

- Suggest that the STATS19 requirement should include:
  - the presence of traffic calming measures such as 'road humps', 'raised platforms' and 'entry treatments'.
  - pedestrian guard rails within 50 metres of a crossing.
  - vehicle passengers so that vehicle occupant injury risk in road accidents can be calculated.

## **9. Transport Research Laboratory**

- Confirm their view that on the basis of their research and development work into the collection of contributory factor data at a local level, that their proposed harmonised national collection form will provide the greatest overall benefit to road safety despite concerns about subjectivity and the potential for legal challenge to the use of the data.

## **10. Huddersfield University**

- Propose that 'journey purpose' should be added to the STATS19 requirement. This would assist in identifying work related accidents. Suggested categories:
  - 'Driving as part of work', 'Driving to and from work', 'Ferrying kids', 'Life and network maintenance', 'Car as load carrier', 'Holidays and weekends away', 'Life enhancement activities'.
- Report that the proposed contributory factors in the harmonised national collection form were used in a research project and found to be inflexible and difficult to use. The principal problem was that there were too many similar choices of factors available for selection.

## 11. Cyclists' Touring Club

- Express concern about under-reporting of cyclist accidents and would like the STATS19 record to identify 'who-hit-who' rather than just identify the vehicles involved in the accident.
- Suggest that the following factors are added to the national collection form for contributory factors;

'eyesight', 'pedestrian failed to check road adequately', 'manoeuvres – failed to take up lane', 'poor road layout', 'no-consideration for vulnerable road users', and 'signs covered by dirt or vegetation'.

- Suggest the following values to be included in the STATS19 requirement;

**'Build out' in 1.20b 'Pedestrian crossing – physical facilities'**

**'Subsidence' in 1.25 'Carriageway hazards'**

**'Pedestrian scooter' and 'Motorised wheelchair' in 2.5 'Type of vehicle'**

**'Entering roundabout', 'Leaving roundabout', and 'Merging from slip-road' in 2.7 'Manoeuvres'.**

**'Build –out' in 2.12 – 'hit object in carriageway'.**

**'Bollard' and 'Seating' in 2.14 'Hit object off carriageway'**

## 12. Rita Taylor (Roadpeace Trustee)

- Takes the view that fatalities arising from injury in a road accident should be recorded as a fatality even after the 30 day reporting rule has elapsed. Furthermore injuries should be classified only after proper hospital examination.

## 13. Slower Speeds Initiative

- Expresses concern that the proposed national collection system of contributory factors sets out a coding frame which will diminish the contribution of speed to road accidents. They take the view that speed is a significant factor in most crashes and that 'excessive speed' will only be attributed when it is a blatant driver failure, and that 'inappropriate speed' is a necessary addition to the coding frame.
- Claim that the national collection form for contributory factors invites attending officers to attribute blame to the pedestrian because pedestrians are only required to exercise 'reasonable' care and not 'due' care as described in the collection form.

## 14. The Superintendents Association (England and Wales)

- Support the proposed adoption of a national collection system for contributory factors, but would like to see supporting documentation to define the factors.

## 15. Sustrans (UK and Cymru)

- Believe that because pedestrians and cyclists do not require insurance to use the road that the STATS19 reporting system leads to under-reporting of these road users and under-estimates their casualty rates.
- Welcome the proposal to consider a 2 tier reporting requirement to simplify the reporting of accidents reported 'over the counter' as long as it improves the quality of reporting for cyclists and pedestrians.
- Would like to broaden the definition of public roads to include traffic free cycle paths.

- Suggest that variable 1.14 'Road Type' should include a code for:
  - Number of lanes in a 'One way Street'.**
  - Carriageways with contiguous footways**
  - Cycle track**
  - Vehicle restricted area**
  - Carriageways with/without 'on – highway cycle lanes'**
  - Advisory cycle lanes and statutory cycle lanes.**
- Suggest that 1.17 'Junction Control' should distinguish the presence of Advanced Stop Lines.
- Suggest that 'Cycle Track' should be included as a specific road class.
- Suggest that variable 1.20b 'Pedestrian Crossing – Physical Facilities' should distinguish:
  - 'Staggered crossing arrangements from 'Non-staggered crossing arrangements'**
  - 'Pelican', 'Puffin', and 'Toucan' crossings separately.**
  - 'Build- out' crossings**
- Point out that the state of repair of the carriageway is critical for the safety of cyclists. Suggest that variable 1.24 'Special conditions at site' should include separate categories for 'excessive quantities of loose gravel', 'potholes' and 'poorly executed repairs'.
- Suggest that variable 2.7 'Manoeuvres' should include 'entering roundabout' and 'leaving roundabout', as well as 'crossing road at controlled crossing' and 'crossing road at uncontrolled crossing'. These are particularly dangerous manoeuvres for cyclists.
- Take the view that 'journey purpose' should be included in the STATS19 requirement.
- Take the view that 'inappropriate speed' and 'mobile phone use' should be included in the proposed national contributory factors collection scheme.

## **16. Transport 2000 and the Pedestrians Association**

- Take the view that the STATS19 system does not deliver reliable information concerning injury to pedestrians and cyclists in road accidents nor a good understanding of how they come to be injured. Both organisations are particularly concerned about under-reporting of accidents for vulnerable road users.
- Make the point that pedestrians and cyclists are not required to be insured to use the road, and this may lead to a perception for reporting officers that there is less need to collect accident information for legal and insurance purposes when motorised vehicles are not involved in an accident.
- Suggest that the STATS19 collection process may benefit from a redesign of the requirement to focus on specific needs of the road accident data.
- Consider that a reduced STATS19 requirement [for accidents involving motorised vehicles] may improve data provision for pedestrians and cyclists.

- Take the view that pedestrian injury sustained on the public road without the involvement of mechanically propelled vehicles (ie pavement falls) should be included in the STATS19 requirement.

#### 17. Parliamentary Advisory Council for Transport Safety (PACTS)

- Support the inclusion of 'journey purpose' in the STATS19 requirement, particularly to provide information on work related injury road accidents. They report that HSE research indicates that between 25% and 33% of all serious and fatal traffic accidents involve 'someone' who was 'at work' at the time of the accident.
- Point out that the use of STATS19 information for investigating occupant protection in car crashes is limited because it is only possible to distinguish injured and, by implication, uninjured drivers. Take the view that the requirement should also include uninjured car occupants so that a fuller assessment of car occupant protection, and the effectiveness of protective devices such as seat belts, and air bags, can be made. This would also require the inclusion of 'seat belt use', 'child restraint use' and air bag deployment in the requirement. Detailed suggestions for their inclusion were provided.
- Support the adoption of the proposed national collection system for contributory factors, but favour more research to establish a form that would, in their view, collect more accurate information. In particular it is pointed out that the proposed national collection form does not allow for the identification of pedestrians and drivers who may be jointly responsible for a road accident. Only one 'blameworthy' road user can be identified in the proposed national coding frame.
- Take the view that the proposed collection form for contributory factors does not deal adequately with 'speeding'. In addition there are concerns that reporting police officers may lack the expertise to judge 'failure' in 'road layout' or condition.

#### 18. The Royal Society for the Prevention of Accidents

- Propose that the following should be included in the STATS19 requirement:
  - 'Journey purpose' specifically to identify work related accidents
  - Mobile phone use
  - Child restraint use
  - Presence and deployment of air bags
  - Cycle helmet use
  - Use of night time lights by cyclists
  - Bicycle use on the footway
  - 'School attended' by child casualty
  - More detail concerning the type of heavy goods vehicle in an injury road accident.
- Support the adoption of a harmonised national collection system of contributory factors. Suggest that the proposed system developed by TRL should also include a codable factor for 'Inappropriate speed'. The Society are concerned that factor 7 'Pedestrian entered carriageway without due care driver/rider not to blame)' may bias blame too much towards pedestrians. In their view there are often a number of actions that a driver could take to avoid an accident even if the pedestrian has made an error. [ Other consultees (eg 13 and 4) have already highlighted the fact that a pedestrian is not legally required to exercise 'due care' but only 'reasonable care for themselves' and that this wording may bias the allocation of blame to pedestrians]

## **19. Brake**

- Propose that 'journey purpose', with particular reference to work related accidents, should be included in the STATS19 requirement.
- Support the adoption of the proposed national collection system for contributory factors.

## **20. Dr Colin Cryer (Centre for Health Services Studies, University of Kent)**

- Reports, as a user of both hospital and STATS19 statistics, that there are significant numbers of road traffic accidents in which the victims attend hospital for treatment but are not reported to the police. [Although, for a number of reasons, under-reporting of road accident data is an inescapable problem, some victims of road accidents are not required to be reported to the police to complete a STATS19 record because they did not occur on the STATS19 definition of a 'public road.']
- Reports, on the basis of available data, that fatalities are accurately recorded in the STATS19 process but that there are significant inaccuracies in the classification of serious and slight injury.
- Takes the view that the difficulty of classifying severity of injury accurately can only be solved by the eventual linkage of health and STATS19 data. Research has demonstrated shortcomings in both STATS19 and Department of Health data when trying to establish data linkage. Considers that research and development to optimise data linkage is essential to unlock the benefits of more detailed injury classification of road accident casualties.
- Warns that the Department of Health's definition of serious injury [defined as a 4 day hospital admission] suffers from the fact that pressure to reduce length of stay in hospital will automatically lead to a downward bias in 'serious injury' trends.

## **21. Institute of Advanced Motorists**

- Requests the inclusion of mobile phone use as an accident causation factor.



(C)

**2002 REVIEW RESPONDENTS : POLICY DIVISIONS CONSULTED BY DTLR**

1. DGB/SP2: Mr A J Slatter
2. RP3: Mr Ian Holmes
3. Department of Regional Development: Northern Ireland : Mrs Adele Watters
4. Government Office: East Midlands: Mr Mike Hewitt
5. ITEA : Mr Peter Gray (co-ordinated response)
6. Department of the Environment (Northern Ireland): Chief Road Safety Education Officer
7. Government Office : North East Region : Fay Mackenzie
8. Drivers Policy Group : DVLA : Sarah Martin
9. CLT3/4 : Bob Richards
10. VSE : Ian Yarnold
11. Home Office :Colin Petter
12. Welsh Assembly (comments from Oscar Faber) : Keith Alexander
13. Highways Agency : Ian Sandle

## **SUMMARY OF RESPONSE FROM POLICY DIVISIONS**

### **1. DGB/SP2: Mr A J Slatter**

- Note that there is no reference to the involvement of vehicles in injury accidents carrying dangerous goods. Limited information is available from Fire Services Policy Branch about 'call outs' of the fire services to accidents involving the spillage of hazardous goods in England and Wales. It is not thought that policy is compromised by omission of this information from STATS19.

### **2. RP3: Mr Ian Holmes**

- Requires information concerning poor road conditions and maintenance to assess their affect upon accidents. Information furnished by 1.23 'Road surface condition', 1.24 'Special conditions at site' and 1.25 'Carriageway hazards'.

### **3. Department of Regional Development: Northern Ireland : Mrs Adele Watters**

- Reports frequent broad use of GB statistics published in RAGB to monitor casualty reduction targets especially, as a comparator for Northern Ireland trends.

### **4. Government Office: East Midlands: Mr Mike Hewitt**

- Nil Return

### **5. ITEA : Mr Peter Gray (co-ordinated response)**

- Information relating to road layout and junction detail, and their condition, are required to appraise the safety effects of transport projects such as congestion charging, motorway tolling, modal transfer, changing speed limits, and adopting new technology on motorways.
- Specifically would like to be able to distinguish between 2, 3 and 4 lane dual carriageways ( the current specification is 2, or 3 or more lanes). Points out that there are motorway to motorway connections which are effectively 1 lane dual carriageways and that these should be accounted for as well.
- Would prefer a specific category for 'slip roads'.
- Recommends that defining junction accidents as occurring within 20 metres of the junction is too restrictive and that this should be increased to 100 metres.
- Would like the ability to be able to specifically identify 'merging' and 'diverging' accidents on grade separated dual carriageways.

### **6. Department of the Environment (Northern Ireland): Chief Road Safety Education Officer**

- Reports frequent use of statistics published in RAGB for ministerial briefing and policy advice. Recommends the re-introduction of seat belt use for vehicle occupant casualties to provide a comparison with such statistics that are still collected in Northern Ireland.

### **7. Government Office : North East Region : Fay Mackenzie**

Nil return

## 8. Drivers Policy Group : DVLA : Sarah Martin

- Describe how the driving licence number would provide a matching key with medical and driver data held at DVLA. Currently the Drivers Medical Group at DVLA is unable to assess how effective it is in deciding upon drivers' medical fitness to drive. The medical condition of drivers involved in road accidents is not part of the STATS19 requirement, however the driving licence number would provide a key to match with DVLA's medical database. The driving licence number would provide the key to assess the relative accident involvement of drivers passed medically fit to drive (and also the involvement of drivers passed unfit to drive but who nevertheless continue to drive illegally).
- Similarly the driving licence number could be used to match STATS19 accident information to DVLA's Driver Improvement Scheme database. The driver improvement scheme offers drivers found guilty of some traffic offences to avoid prosecution if they can pass a training course. The matching process would provide the ability to assess the effectiveness of the scheme.
- The minimum age for driving large vehicles in the UK is 21. However European legislation allows qualified drivers from the age of 18 to drive large goods vehicles on temporary visits to other Member States, provided they hold a certificate of professional competence confirming the completion of a training course. The STATS19 requirement allows for the identification of foreign drivers (and their age) of large vehicles but it would be useful to additionally establish country of residence and the issuing country of driving licence.

## 9. CLT3/4 : Bob Richards

- Support the development of a national system for collecting contributory factors.
- Concerned about the reporting rate for accidents and pedestrians and would like to see additional values included in the requirement to provide more accurate information about cycle and pedestrian accidents. Report that most of the current STATS19 variables are used by CLT. They are used to assess the characteristics of accidents and their causes which may involve cyclists, pedestrians, and motor vehicles on roads up to and including trunk roads with special interest in traffic calmed areas, 20 mph zones and residential areas.
- Suggest the following additions to the STATS19 requirement;

**'Type of Authority' (County , MBC ) in 1.10 @Local Authority**

**'Traffic calmed road' in 1.14 'Road Type'**

**'Badly damaged road surface' in 1.23 'Road Surface condition'**

**'Traffic calming features present' in 1.24 ' Special conditions at site'**

**Amend codes 4 and 5 in 2.9b 'vehicle location'**

**To**

**'Cycle lane on carriageway'**

**'Cycle track away from the carriageway'**

**'Cycle track adjacent to carriageway'**

**'Traffic calming feature' (specify eg road hump) in 2.12 'Hit object in carriageway'.**

**'Tick box if pedal cycle' in 2.17 'other vehicle hit'**

**'On cycle track' in 3.10 'Pedestrian location'**

**'Walking on footway/verge' and 'walking on cycle track' in 3.11 'Pedestrian movement'.**

- Suggest the inclusion of the use of advanced stop lines as a contributory factor..

**10. VSE : Ian Yarnold**

- Points out that a DTRL sponsored research project based on detailed on the scene accident investigation into accident causation will soon produce a database available for interrogation.

**11. Colin Petter : Home Office**

- There is a policy interest in the economic and social impact of vehicle crime. One aspect is the involvement of stolen vehicles in road accidents apart from their use in other criminal offences. The Home Office is commissioning research to attempt to establish the 'social harm of vehicle crime' and the inclusion of 'stolen vehicle' in the STATS19 requirement would be a useful source of data.
- Support the need to develop data linkage to exploit the full potential of separate datasets. This could increase information without having to increase the burden upon the police to satisfy persistent demands for more data.

**12. Keith Alexander : Welsh Assembly (comments from Oscar Faber)**

- Confirms that the full range of STATS19 data is essential for monitoring accident and casualty reduction and to target local safety schemes, within the framework of the Trunk Road Safety Plan of the National Assembly. In particular all the data variables and values are used for analysis.
- There is particular concern that any changes to reduce the reporting requirement (through the possible introduction of a reduced reporting requirement for accidents reported 'over the counter') may lead to a reduction in the reporting of slight injury accidents whether 'over the counter' or at the scene of the accident.
- Takes the view that hand held GPS may not be that essential to improve locational information since many police forces are equipping police cars with tracking devices which could be used to locate those accidents attended by police officers (in a police car).
- Supports the proposal to introduce the proposed national collection system of contributory factors but takes the view that any proposal to introduce new variables (including the STATS19 requirement) should only be supported if this does not detract from the quality of the reporting of existing data.

**13. Highways Agency : Ian Sandle**

- Takes the view that improving the quality of current data requirements is preferable to increasing the requirement.
- Supports the view that causation factors in road accidents can be very informative as long as the data is reliable. Would like to see an assessment of the reliability and consistency of reported contributory factors in the national collection scheme. Proposes that available data should be compared with information emanating from an 'On the spot accident data collection project' managed by VSE to check on the reporting accuracy from those areas deploying the national collection system.
- Would like the accident text description to be supplied through the STATS19 requirement.

(D)

**LIST OF ORGANISATIONS RESPONDING TO THE SCOTTISH EXECUTIVE.**

**CC - Central Scotland Roads Accident Investigation Unit**  
**HC - Highland Council**  
**NAC - North Ayrshire Council**  
**CRU - SE Central Research Unit**  
**EDC - East Dunbartonshire Council**  
**RSB - SE Road Safety Branch**  
**NLC - North Lanarkshire Council**  
**SLC - South Lanarkshire Council**  
**DCS - Deer Commission for Scotland**  
**EC - Edinburgh Council**  
**ELC - East Lothian Council**  
**GC - Glasgow Council**

Their comments were reported in a paper which the Scottish Executive prepared for a meeting of the Liaison Group on Road Accident Statistics in October 2001, the relevant parts of which appear below

**LIAISON GROUP ON ROAD ACCIDENT STATISTICS - LGRAS (01) 5**  
**THE 2002 QUALITY REVIEW OF ROAD ACCIDENT STATISTICS**

**A. Introduction**

A.1 The 2002 Quality Review is being conducted by the GB Standing Committee on Road Accident Statistics (SCRAS). Members of the Group, and non-members who receive copies of LGRAS papers, were sent the following under cover of Frank Dixon's letter of 18 July:

- a "Scoping Paper", prepared by Peter Wilding of the Department for Transport, Local Government and the Regions (DTLR), who is the Review Project Officer. This sets out some of the issues that the review will cover (it can, of course, look at other topics);
- a copy of the current STATS 19 illustrative coding form, as a guide to the current range of data items;
- questionnaires, for use in responding to the consultation process (further comments could, of course, be made on separate sheets); and
- a list of those to whom the letter had been sent.

Members of the Group should bring these papers with them, for reference at the meeting.

A.2 In addition:

- Superintendent Lawrence Wynne, who represents the Association of Chief Police Officers (Scotland) on SCRAS and LGRAS, wrote separately to ACPOS members;
- Andy Duff, who represents the Convention of Scottish Local Authorities on SCRAS and LGRAS, wrote separately to members of the Society of Chief Officers of Transportation in Scotland;
- DTLR wrote to a number of GB/UK-wide bodies and organisations, including (in some cases) their Scottish branches or contacts.

A.3 The closing date for responses was Friday 7th September. This paper sets out all the responses that had been received by the Scottish Executive by Tuesday 18th September. Superintendent Lawrence Wynne and Peter Wilding prepared summaries of the views of (respectively) members of ACPOS and those who sent comments to DTLR, and these are attached as Annexes to this paper. Members of SCOTS were asked to send their comments to the Scottish Executive.

A.4 This is just the first stage in the Review (the timetable for which is shown on page 11 of the Scoping Paper). A SCRAS meeting on 11 October will discuss these matters, and then, over the next six months, a SCRAS working group will consider the suggestions and comments in detail, and develop proposals further. *Interim* conclusions should be reported by the end of March 2002, and LGRAS and other groups would then meet to give their views on these. A final detailed specification of the changes to be made to the STATS 19 returns should be produced by the end of December 2002, at least a year before new systems would have to be implemented in 2004.

**A.5 Members of the Group are invited to raise any questions that they may have about the arrangements for the conduct of the Review.**

**B. Views expressed to the Scottish Executive**

This section of the paper should be read in conjunction with the original "Scoping Paper". It lists the issues that were identified in section 6 of the Scoping Paper, and provides a summary of the suggestions and comments on each that were received by the Scottish Executive. *The views expressed are respondents' own and may not be shared by the Scottish Executive.* (NB: some of the comments have been edited for brevity and to improve "readability", but Transport Statistics would regret it greatly if it had misrepresented significantly any respondents' views in this paper). **Members**

of the Group are asked for views on these issues, and their responses to the suggestions and comments recorded below.

## 1. Evaluation of 1997 review changes. Were they effective?

- The cost "... was acceptable. It was small compared with the continuing costs of the Stats19 system."

- Driver and casualty post-code data

"immediate use ... as a means of distinguishing casualties' origins (particularly drivers). Greater use may be made of these variables in future, when more data will have been collected."

"Home address post codes are a valuable variable for a wide range of research applications."

"It is not clear how the accuracy of the post coding can be checked without the address, which is not available to engineering practitioners."

- STATS 19 definitions of 'public road' and 'reportable accident'

"The table on page 5 of STATS 20 is "clear" and "helpful". It "raises questions such as what is meant by a private residential estate/shopping park/industrial estate ... To whom are injury accidents which occur on the excluded roads and car parks reported? By whom are they analysed? Their severities are a concern. There have been fatal accidents in car parks ... it may be that car park design deserves more attention, than it currently does, and the data would be useful in deciding what priority it should have."

"The expected definition of "public road" (see NOTE preceding the table) does not appear. The NOTE following the table gives the false impression that a road in Scotland is a road with unrestricted right of access for ... motor vehicles [only]."

- 1.17 Junction Control - "The confusion caused by the mistake in Note D following the 1997 review was unfortunate. Correction took far too long and was not of a sufficiently high profile. The SCRAS newsletter does not appear to have reached all data collectors".
- 1.23 Road Surface Condition - "The introduction of conditions that are not mutually exclusive has greatly reduced the usefulness of this variable. The surface can be wet or dry and have oil or mud on it at the same time. If there is mud on a dry road does the reporting officer use code 1 or code 7? What code is to be used if mud and oil are present on a wet road surface? The utility of this variable must be restored as a matter of urgency."

## 2. Concerns about current reporting and coding practices.

- Any police force considering reducing the STATS 19 reporting requirement for 'over the counter' reported accidents - "is a matter of concern. Stats20 paragraph 2.1 clearly states that all relevant accidents notified to the police within 30 days of occurrence are to be reported. This reinforces the need for practitioners to be ever wary of the possibility of changes in the inclination to report accidents, and the effect that that may have on the data, and hence on naïve before and after studies. It is particularly important in the current 'target setting, performance indicating and blame allocating' culture. In the case of accident reporting, the target should be completeness and accuracy, not casualty severity reduction. The latter can be achieved by a reduced inclination to report, achievement of the former would be facilitated by better form design. If 1.26 'Place accident reported' is coded 2 (elsewhere), this may be a sufficient indication to practitioners of the reason for incomplete Stats19 data. Another tier is not required."



- Hand held global positioning systems (GPS) devices -

"We would support greater use of global positioning systems to improve the accuracy of grid reference information. This is particularly important in rural areas where it is very difficult to identify the location of accidents and hence develop remedial measures."

"The accuracy of the locus grid references is extremely variable and many problems would be solved by the use of GPS's"

Respondent "anticipates that the police forces would be permitted to buy GPS devices, using taxpayers' monies, in the expectation of reducing the costs generated by the current inaccuracies ... if central government was interested in the introduction of hand held GPS, data quality might improve very shortly after the police were provided with the necessary funds."

- Should national road accident statistics be accounted for on a financial year basis instead of a calendar year basis - "... explain why reporting on a financial year basis simplifies the provision of Stats19 data, and how it will enhance the comparison of local and national statistics. It seems unlikely. It will certainly not enhance international, or many other comparisons, nor will it enhance the data quality, or the work dependent upon it. .... While identifying problems in the transport system practitioners compare many other data. These are, conventionally, presented in calendar years. How are long term and other comparisons to be made? ... What benefit will be derived? How will quality improve? Any body which wishes to extract data on the Treasury financial year basis, or any other, can easily do so. National data such as that contained in the Casualty Report or Road Accidents Scotland should, however, continue to be presented by calendar year and five calendar year averages. If accident investigation and remedial work is considered important, the task should not be made more difficult. "
- The quality of current data, and form, screen and database design. "Reporting officers continue to confuse:
  - nearside / offside; at 2.8 'Vehicle movement compass point' – the 'from' compass point is often confused with compass point towards which the vehicle is initially travelling.
  - mandatory and advisory signs – not helped by the 1999 version of STATS 20.

"These problems probably stem from the fact that most officers report only a few injury accidents in any year. No amount of instruction or training will compensate for lack of practice. Accidents remain rare, and increasing rarity should indicate success. Consequently, perhaps, most reporting officers seem to forget the existence of STATS 20. Some do not appear ever to have heard of it. The solution lies with the design of the collection medium, whether by paper form or computer screen. Better design of report forms/input screen layout should make completion intuitive, and a marked improvement in data quality should result. .... replace existing data entry forms/screens with the ergonomically designed forms/screens suggested by researchers...would immediately simplify the data input task and improve data collection .... an improved database structure would eliminate repeated collection of data (not necessarily accurately) already available elsewhere, and would facilitate a wider range of analyses than is possible now. .... replace current accident databases with those designed to the specification suggested by researchers ... (Middlesex University: Professor Chris Wright and his team)."

### 3. Casualty reduction targets and proposals for changes in severity definition.

- Definition of "severity" -

"... DoH is working with a wide range of accidents ... DTLR/SE/NAW is working only with road accident casualties ... definitions of serious (casualty) injury differ. Given the lack of rigour with which targets are set, the distortions they cause, and the fact that those mentioned cannot be compared, anyway, it seems barely worthwhile entering into another debate about severity at this stage."

"The DoH definition of serious injury needs to be explained. Does it not put pressure on hospital staff to discharge patients before four days have passed, in order to meet targets? The concern is that it may be related to an arbitrary point in cumulative cost to the organisation as opposed to society as a whole. It is not clear whether length of stay in hospital is any better a measure of injury severity than the Stats19. A four-day stay in hospital may be followed by a rapid return to work. On the other hand, it may not. A slight injury may still have a long-term effect, with serious effects on the economic contribution of the injured party. It is not clear what the concern is, here. A great deal of work has been done by TRL and DoT on the cost of serious road accident injuries within the DoT serious and slight range (TRL Project Report 106, for example). Perhaps the scope should be widened to define clearly what is the problem."

### 4. Proposals for the addition of new variables and values - and modifications to variables.

#### 4.1 A general comment from one respondent

"Additional variables should not be considered until the quality of those currently reported is substantially improved."

#### 4.2 Attendant Circumstances fields

1.8 Day of the week - "Re-instate" (removed after 1992 review)

1.11 Location - "Replace references to 'grid reference' with 'OS grid co-ordinates'... Stats19 employs Ordnance Survey grid co-ordinates to a precision of 10m, not grid references. There is no merit in maintaining poor quality by continuing to confuse these."

1.12 Road Class - "Replace references to road 'class' with road 'division'."

1.23 Road Surface Condition - "Restore mutual exclusivity"

1.25 Carriageway Hazard - "... there is concern about the number of accidents caused by animals such as deer being on the roads, however it is difficult to identify such accidents by using the existing data. Changes would allow better identification of such accidents."

- Mobile phones

**"... strongly support the suggestion that use of mobile phone be included in the list of causation factors."**

"... support the addition of mobile phone usage - ... I don't see this going away as an issue."

"Data relating to the use of mobile phones would be useful."

"It should be perfectly possible to disable mobile telephones while they are moving along roads. Perhaps Ministers would support the introduction of the appropriate technology, having failed to prevent a further deterioration in the seriousness with which the population regards the driving task. The question of adding another *contributory* factor would not then arise."

- Text description to help identify trunk road accidents

"Due to the recent privatisation of trunk road maintenance in this area, the inclusion of identifier for trunk roads, as distinct from non-trunk, would be useful."

"... the division of the national road network into two sub-networks has done nothing but harm to the casualty reduction effort, and the existence of two budgets in most local government areas guarantees that taxpayers' monies cannot be expended optimally ... The question arises as to where the line might be drawn between the sub-networks at junctions. How would this be dealt with in Stats20? Would all such accidents be regarded as attributes of the local sub-network to help contractors meet their targets? The additional burden of a text description should be rejected again. The OS grid co-ordinates should be sufficient for the purpose."

- Local projects box - "There is a special projects box for DTLR use. It is sometimes desirable to collect data at a local level. Could a Local projects box be added? This would remove any clash with DTLR special projects."

#### 4.3 Vehicle fields

2.13 Hit Object on Carriageway - "... there is concern about the number of accidents caused by animals such as deer being on the roads, however it is difficult to identify such accidents by using the existing data. Changes would allow better identification of such accidents."

- Foreign vehicles

"Create new field, value 1 = left hand drive, value 2 = right hand drive."

"... foreign vehicles ...practical suggestion for adding a variable"

"... would like foreign vehicles collected"

- Driver experience from Driving licence number - "Plenty of research on driver experience already. Why do we need a code now?"
- "Local projects box" - see the comment under Attendant Circumstances

#### 4.4 Casualty fields

3.6 Casualty class - "expand to facilitate analyses."

- "Local projects box" - see the comment under Attendant Circumstances
- School child injury after having alighted from a school bus.

"Data would be useful to quantify scale of this problem. Regarding possible remedial measures, once we gauge the scale of the problem it may be that a radical solution would be justified eg banning overtaking if stationary buses?"

"... With regard to defining "after having alighted", the most likely scenario seems to me to be where a child gets off a bus and steps into the road from the front or back of the bus while it is still stationary. This would suggest something along the lines of "after having alighted from school bus, bus stationary". This may not be ideal, as there may well be some cases where a child attempts to cross the road from behind the bus as it moves off. However, it would probably be easier for the police to record the child's action in relation to a stationary bus than to attempt to establish the distance travelled by the bus after moving off in relation to a pre-set limit. An alternative might be "after having alighted from school bus, within 10 metres of school bus dropping off point". The problem here is that the child may not cross the road while the bus is in the immediate vicinity. On the question of possible remedial action, there may be no need for this. The primary aim would be to collect reliable data. The

need for remedial action would be considered in the light of the information obtained and, if thought necessary, that could be more than just publicity."

"This accident type is relatively rare ... can easily be identified locally if research is required. .... Remedial action might include children warning sign on rear of 'bus, in place of the usual advertisements addressed to drivers, whose attention would be better directed to task they have in hand."

- Seat belt and child restraint usage

"Seat belt usage should be reinstated with due care to ensure that there is continuity with previous years' data. Child restraint usage may require a new field."

"... would like seat belt and child restraint usage collected"

- Air Bag deployment - "Create new field"

## **5. Proposals for the deletion of under-used variables and values.**

- "The police should not have repeatedly to record data that has already been gathered ... work of Middlesex University on the structure of road accident databases. These can capitalise upon data available elsewhere, and so free reporting officers to concentrate on collecting the more transient variables."

## **6. Proposal to formally adopt the collection of contributory factors.**

"There must be a national collection system introduced so as to improve the consistency of the collected data and reliability in the stored and analysed data."

"Support a national collection system of contributory factors - use would be made in both road safety planning and AIP work."

"Contributory factors are particularly required for causations such as 'foreign driver', 'stolen vehicle', 'road works', 'weather/road surface conditions'."

"Would like to see contributory Factors becoming compulsory"

"Ability to have multiple contributory factors in order of relevance, would be very useful"

"If this can be achieved it would be a valuable resource for research e.g. on impairment."

"Agreed that a standard system would be more sensible. ... hard to believe that less than 4% of the forms returned during the trial period were regarded as unsatisfactory. Satisfactory completion of these forms has not been our experience. In any event, satisfactory completion of the form does not guarantee data quality or value. The scope should be widened to take account of the cost of this, so far unsuccessful, measure."

"... the collection of data for causation factors as suggested would be of limited value. Persons involved in accidents are unlikely to offer information, such as "in a hurry" or "fatigued", which might incriminate them. Also human nature being what it is officers recording the information would more likely top choose "possible " or "probable" in relation to the confidence level for each contributory factor. How useful is it to know that something may possibly have been a factor? It is also important to remember that this is only one persons opinion and that another person who is more experienced may have a diverging opinion"

"... there remain strong reservations about the form and the possible legal complications. This is not surprising, and should be enough to stop the trial in its tracks. This does not mean that practitioners do not find the opinions of reporting officers useful. They are. It is not suggested that a means of collecting them in a regular manner is not a good thing. However, practitioners remain doubtful about the application of these data to campaign direction. The data are too easily influenced by 'flavours of the month', as the current obsession with speed has shown. Their proposed use as a guide to education and enforcement activities is a cause for concern."

"Noted that the DTLR will assess the results of the causation factor analysis to be carried out by the Transport Research Laboratory (TRL). Practitioners might prefer to assess TRL work themselves, and trust that the results will be open to their separate, independent, appraisal. Contributory factor recording is in a state of chaos. The form design is not helpful, and that issued by the Scottish Executive is even less so than that shown in TRL Report 323. In particular, TRL warned that the term causation was too definite, and failed to take account of the practical difficulties of establishing why failures and manoeuvres (precipitating factors) occurred. This advice appears to have been overlooked.

Most reporting officers appear to have little idea of how to enter the data required, e.g:

- "Failed to stop (mandatory sign)" is often reported at sites where there is only a give way sign, where there is only an advisory give way (at a roundabout) and even where there is no sign or marking!
- Attempts are often made to enter more than one precipitating factor.
- Many fail to assess the relative importance of contributory factors.
- Some attempt to indicate more than four contributory factors or dodge the issue by selecting "Other" factors without any indication of what they might be.
- Vehicle or casualty reference numbers are often entered in place of V or C.

In 30 months, we found only one reporting officer who selected an 'Other' code actually indicating what the 'other' factor was thought to be. It is not unknown for precipitating and contributory factors to be selected by a data entry clerk, on the basis of his interpretation of the reporting officer's description. Although it is estimated that less than one third of the reports received to date contain any useful information, an indication of the number of pedestrians affected by alcohol at the time they were involved in an accident has been provided. The collection of contributory factors should not be adopted formally until form design is perfected and adequate training is provided. Otherwise, the result will be a series of accident reduction activities based on confused and misleading data, and another impediment to real progress. It is essential that the data, upon which all casualty reduction efforts are based, are of the highest quality. Reporting officers are doing their best, and this review should support their efforts by improving the tools with which they are supplied."

## **7. Data linkage with health, crime and socio-economic statistics.**

"... researchers such as McGuigan have done some analyses using post-codes, but this may have been done independently of the Stats19 changes."

## **8. International perspective and commitments.**

"... the claim that the road accident database for Great Britain is well known for its high quality and coverage may be true at a basic level. However, its quality in areas of interest to local practitioners leaves something to be desired. Serious attention to the input form and database design would make a tremendous difference not only to data quality, but also to the workloads borne by police, health board and local authority practitioners. Much more time would become available for practitioners to concentrate on analyses instead of validation."

## **9. Availability and presentation of national road accident statistics.**

- "Practitioners and researchers require data on a calendar year basis, and this should be emphasised in the review. Accessibility should be arranged such that bona fide practitioners and researchers can download data for manipulation to suit their specific purposes. This might be simpler than trying to accommodate all possible requirements in one publication or on one website."

- "The most appropriate information that should be available on the internet should include an explanation, with appropriate references, of the scientific research background to each road safety campaign and measure."
- "Care must be taken to limit the fineness of detail made available. Practitioners are, or should be, only too aware of how unreliable the data for individual accidents can be. Out-of-field researchers and others can be easily misled."

#### **10. Data protection.**

" The ONS advice would seem perfectly adequate to the layman, who may not wish his post-code handed out to any body with interests other than the public good at heart. In passing, it is noted that it seems that the purpose of providing data to contractors is so that they can claim payments for 'verifiable' safety improvements. If so, practitioners will be interested to learn more of the means of 'verification'. More interesting would be an explanation of how the relevant contractual arrangements deal with the situation where a remedial measure turns out to be flawed in the longer term. Does the contractor have to re-imburse the client? What if he is no longer employed by the client? What if he has gone out of business? Or does no-one check?"

#### **11. Ownership, supply and charging arrangements for national and local road accident statistics.**

- The Guidelines for disseminating and charging for STATS19 data by DTLR and the Scottish Executive and the National Assembly for Wales set out in Appendix D of the last review "merely *proposed* guidelines. It is not clear whether these are now mandatory, or what local authorities are supposed to do. The scope of the review should include clarification of this point."
- "It may be interesting to have examples of how some local arrangements work, but the problem of the proliferation of local road authorities and contractors is a political one, and cannot properly be addressed other than by political means .... restore coterminous boundaries to those 'partners', such as the police, health board and local road authority, who are supposed to be 'working together' on the casualty reduction front."
- "The taxpayer has already paid dearly for the collection of the data, and continues to pay more than is really necessary for its refinement. He should not be obliged to pay for it again. Charging contractors merely ensures that the contractor will charge back through his rates, so that the taxpayer has to pay again."

#### **12. Standard Formats for the supply of STATS19 data to DTLR/SE/NAW Implementation time for modifications to the STATS19 process**

- Currently, the only available format accepted is a "fixed column" ASCII flat file which contains a mixture of record types - "There seems little need to change this. It is not difficult for users to do their own conversions."
- "No implementation date other than 01 January of a suitable year is acceptable."

#### **13 Other comments made to the Scottish Executive.**

- "This study has cost around £1500, which should be taken into account when considering total Stats19 costs in the future. It is essential that this review does lead to a demonstrable improvement in data quality, particularly when the last two reviews failed so to do."
- "Appendix F of Part 2 of Statistics bulletin (98)14, refers to the 'internal' cost of collection to central government. Local authority and police 'internal' costs are also referred to, but the £9 per accident seems low. In our experience, work in enhancing the quality of the Stats19 data to a level at which it can be used to plot accidents is around £20 per accident. To this should be added police time in responding to queries, and the cost of the diversion of our and police personnel from the tasks upon which they ought to be employed. Realisation of this by those in a

position to make a real difference might help to justify the initial costs of setting up the improved methods of collection and analysis that practitioners would like to see introduced."

- "all practitioners know that the data quality is not good. The scope should specifically address new ideas which will reduce the burden and increase the quality. Collection costs will reduce with the adoption of better practices, and therefore need not concern taxpayers to the same extent as they are alleged to now."
- "Can any of the working group be described as practitioners?"

C. **Summary of responses to the "tick box" questions addressed to data users**

This section of the paper summarises the answers received by the Scottish Executive to the "tick box" questions that were addressed to data users. **Members of the Group may wish to note or comment on these findings.**

*How much use do you make of road accident data?*

Regularly throughout the year	14
About once a year	-
Every few years	-
Never	-
Total number who answered the question	14

*How do you obtain STATS 19 data?*

From publications	6
From data requests directly to Government	-
From the Economic and Social Research Council (ESRC)	-
From the Internet	-
From other holders of STATS 19 information (*)	14
Total number who answered the question	14

(\*) the following types of other holders of STATS 19 information were mentioned by the numbers of respondents shown:

Police	14
Scottish Executive	1

*Is the STATS 19 data source essential for your work?*

Yes	14
No	-
Total number who answered the question	14

*Are you aware of other data sources which could be used in place of STATS 19 for your work?*

Yes (*)	3
No	11
Total number who answered the question	14

(\*) the following types of other data sources were mentioned by the numbers of respondents shown:

DTLR website	2
SE website	2
RAS	1
RAGB	1
"Copies of police 442 forms are used for detailed analysis of road accidents"	1

*Are there additional road accident analyses you would like to see published or placed on government web sites?*

Yes (*)	-
No	14
Total number who answered the question	14



## 2002 REVIEW RESPONDENTS : SCOTTISH POLICE FORCES

1. SCOT POL 1 LOTHIAN AND BORDERS POLICE
2. SCOT POL 2 STRATHCLYDE POLICE
3. SCOT POL 3 TAYSIDE POLICE
4. SCOT POL 4 GRAMPIAN POLICE
5. SCOT POL 5 FIFE CONSTABULARY
6. SCOT POL 6 NORTHERN CONSTABULARY
7. SCOT POL 7 DUMFRIES AND GALLOWAY CONSTABULARY
8. SCOT POL 8 CENTRAL SCOTLAND POLICE

### SUMMARY OF RESPONSE FROM POLICE FORCES IN SCOTLAND CONSULTED BY ACPO(S)

#### 1. SCOT POL 1 LOTHIAN AND BORDERS POLICE

- Recommendation that a seat belt (yes/no) box could be included in the stats19 system to provide accurate data for enforcement analysis and strategy.
- Recommendation that air bag deployed (yes/no) box is included in the stats19 system to provide data on crash casualties and injuries.
- Although speed would be problematic to determine in all cases, a common sense directive could be introduced to the system which would provide sufficient detail to ensure a 'probable cause' criteria and assist with future targeting of locii and offender profiles. A 'speeding - probable cause' (yes/no) box could be included to simplify data recording.
- Agreed that consideration be given to include mobile phone use as an additional causation factor. Some concern was raised regarding detection, however this would only be reported if sufficient evidence was available.
- All child injury crashes should be included without confusing issues. Details of whether 'alighting from school bus' would be included in the summary of events and may be dealt with locally if concern is raised regarding a particular locus.
- Driver fatigue has featured lately on various motoring programmes and is a growing concern particularly in relation to work related crashes. Further discussion is needed to identify the scale of the problem and to what extent it features as a causation factor.

#### 2. SCOT POL 2 STRATHCLYDE POLICE

- The accuracy of place accident reported causes problems and it is suggested that this field be amended to:
  - reporting officer present at locus
  - reporting officer eye witness
  - reported at police station
- The value of using postcode data should be examined to asses its limitations and whether it could be linked to Health Board files.
- There has been no significant increase in single cycle accidents over the past few years as a result of clarification. Encouraging police officers to report these accidents continues to be a problem.

- Strathclyde Police applies the 30 day reporting rule as per the guidelines.
- Hand held GPS systems are still too expensive to provide to all officers. The airwave project may be the answer to this problem.
- We welcome the introduction of the move to fiscal year reporting.
- There is a pressing need to re-define injury severity to properly reflect the seriousness of injury sustained.
- It is difficult to establish if an accident is work related.
- Accidents caused by a driver using a mobile phone is difficult to establish with any accuracy. Drivers are reluctant to admit this offence for fear of punishment.
- Driver experience is due to more than just time since they passed their test. The average number of miles travelled per annum is also a factor as is familiarity with a vehicle or locality, or conditions.
- Do not support collection of data on seat belts or the introduction of collection on airbag deployment.
- Do not support the introduction of collection of contributory factors. Consultation with Strathclyde Local Authorities supports our view that the present system is adequate for our purposes.
- Concern regarding data protection especially if linkages are pursued.

### **3. SCOT POL 3 TAYSIDE POLICE**

- Fully support the proposal for collecting data on contributory factors and have no difficulty with the suggested format. Analysis would enable greater ability to focus traffic patrol, prevention, and enforcement activity.
- The collection of airbag deployment data and foreign vehicle data is also supported. A check box for foreign drivers would also be useful.
- Tayside Police already collect contributory factors information to help target police patrols and enforcement activity.

### **4. SCOT POL 4 GRAMPIAN POLICE**

- Given the already recognised importance attributed to the inclusion of contributory factor data, and its use by local authorities in developing remedial measures at accident locations etc, the value of its retention as described can only further enhance those measures.
- Coding contributory factor data as described can only enhance and or add credibility to precipitating factor data, thereby adding value to the accident data obtained for effective analysis and use thereafter. It is encouraging that few problems were encountered among participating Forces during the trial period referred to.

### **5. SCOT POL 5 FIFE CONSTABULARY**

- The collection of contributory factors continues to provide important information used in the formation of road safety strategy.
- Stats19 provides a comprehensive range of data in its present form. However it requires a facility to identify when a hit and run accident has occurred rather than time reported.

## **6. SCOT POL 6 NORTHERN CONSTABULARY**

- Support the introduction of an effective system of collection of contributory factors provided it does not lead to excessive costs.

## **7. SCOT POL 7 DUMFRIES AND GALLOWAY CONSTABULARY**

- The scoping paper appears to cover many of the additional factors that would be beneficial. In addition driver fatigue is very topical at present although clearly it is difficult to be 100% accurate with this information. Excessive speed may also be useful but difficult to give any accurate assessment by an enquiry officer.
- We can see the benefits in collection of this data which would be of use in informing us in terms of education, enforcement and engineering.
- Fully support the introduction of the system.

## **8. SCOT POL 8 CENTRAL SCOTLAND POLICE**

- Precipitation and causation factors could be made clearer as they are often misinterpreted by officers completing the form.
- Fully support the introduction of collection of contributory factor information in relation to the use of mobile phones or similar technological distraction.
- We do not support the introduction of recording driver number due to data protection issues.
- We do not support a text description to identify trunk roads when this can be done by analysts.
- Support the introduction of a field for airbag deployment.
- Support the introduction of a field for foreign drivers and vehicles.
- Support the introduction of the national collection of contributory factors.

**(F)**

**2002 REVIEW RESPONDENTS: WELSH LOCAL AUTHORITIES AND ASSOCIATED BODIES**

- 1. Ceredigion County Council**
- 2. Rhondda Cynon Taff County Borough Council**
- 3. City and County of Swansea**
- 4. Powys County Council**
- 5. Bridgend County Borough Council**
- 6. Local Government Data Unit – Wales**
- 7. Pembrokeshire County Council**
- 8. Cardiff County Council**
- 9. Gwent Consultancy (on behalf of Blaenau Gwent County Borough Council, Caerphilly County Borough Council, Monmouthshire County Council, Newport County Borough Council, Torfaen County Borough Council and Gwent Consultancy)**
- 10. Denbighshire County Council**
- 11. Wrexham County Borough Council**
- 12. Flintshire County Council**
- 13. Glamorgan Engineering Consultancy**

## **SUMMARY OF RESPONSE FROM WELSH LOCAL AUTHORITIES AND ASSOCIATED BODIES**

### **1. Ceredigion County Council**

- Concern expressed that information recorded is inaccurate and sometimes contains gross errors, necessitating rigorous checks.
- Do not favour any additions to data collection requirements.

### **2. Rhondda Cynon Taff County Borough Council**

- Would like data on non PIA accidents collected.
- Stress that Contributory Factors are most important in accident analysis and remedial work.
- Inclusion of new variables and values covering work related accidents, damage only accidents, school child injury after having alighted from a school bus, mobile phone use, driver experience from driving licence number, text description to identify trunk road accidents, seat belt and child restraint usage, air bag deployment, foreign vehicles and driver familiarity with the area would identify potentially valuable information sets.

### **3. City and County of Swansea**

- Would like confirmation of Speed Limit as additional road accident data.

### **4. Powys County Council**

- Would like to see Journeys to and from School as additional Road Accident data to be collected.

### **5. Bridgend County Borough Council**

- No Additional Road Accident data required.
- Would favour a National Collection System of contributory factors.
- Now that the pilot scheme for the hypothecation of Speed Camera Revenue has been rolled out nationally, would like to see “before and after” comparisons of accidents at camera sites introduced as soon as enough “after” data has been collected.

### **6. Local Government Data Unit – Wales**

- Wish to emphasise the need for residence information on drivers and casualties. See below.
- The 1997 review accepted the need for driver & casualty post code information to enhance the potential for linking road accident data with health, crime and population statistics. Post code information could usefully distinguish between local and non-locals. Has any analysis or data linkage been done?  
How accurate is the post coding?

## **7. Pembrokeshire County Council**

- Would like the following additional data recorded
  - i. Damage only accidents (spotting potential problems).
  - ii. Use of mobile phones.
  - iii. Foreign vehicles (2 ports in Pembrokeshire and this could determine if campaign needed).
  - iv. If a cyclist has undergone training.
  - v. Police to input 6 figure grid references.

## **8. Cardiff County Council**

- Are happy with the proposed content of the database, but are concerned about the quality of the data, particularly the location of accidents, road identification and descriptions of the incident. These need improvement of accuracy & content.

## **9. Gwent Consultancy (on behalf of Blaenau Gwent County Borough Council, Caerphilly County Borough Council, Monmouthshire County Council, Newport County Borough Council, Torfaen County Borough Council and Gwent Consultancy)**

- Support the concept of national collection system of contributory factors, however, the current system appears to be complex, especially from the completing officers point of view. The data also needs to be reliable, which is not always the case with current local systems.
- Do not favour additional data items. The cost implications of modifications to software far outweigh any benefits gained from the extra data collected.
- The content of Road Accidents Great Britain and Road Accidents Wales varies appreciably. Data will appear in one of these documents and not in the other, or it will be presented in an entirely different format. Consistency of presentation would assist data comparisons.
- Variable 2.8 – Parked vehicle requirements are completely misunderstood and are consequently poorly recorded. It is suggested that the current codes be replaced with a single code 'Parked vehicle' without directional requirements.
- Variable 2.12 – Codes 03 and 04 are never used. Simplify to one code – 'Parked Vehicle'
- Consider the introduction of an additional code to Variable 2.7 – 'Slowing'
- Problems with the 'Place Accident Reported' item have been experienced. Police officers frequently say 'No', although they have attended the accident.
- The wording 'unless Highway' as set out in paragraph 2.4 of the 'Accidents to be Reported' can be misinterpreted. Consider change to 'unless Public Highway'.
- The definitions of footway, carriageway and highway as used in Stats. 20 are not appreciated by some. Further clarification is required.
- Accidents reported at Police Stations are often badly reported and Stats 19 requirements are not satisfied. Insufficient details are frequently not taken by reporting officers/civilians.
- Whilst the concept of the proposed national system for collecting contributory factors is supported, there are reservations about its complexity and reliability.

## **10. Denbighshire County Council**

- Agree that it would be appropriate to have a national system of contributory data and access to this system.
- The 'Hit and Run' variable does not allow for the driver being traced after the accident and details such as sex and age of driver then being obtained.
- Seat belt information is collected by North Wales Police, but it would be useful if this was collected nationally and the data be made available.

## **11. Wrexham County Borough Council**

- Support national collection of contributory factors.
- Would like to see a national breakdown of casualties and by UA as per BVPI99
- In 1.25 'Carriageway Hazard' include 'horses' as a separate code.
- In 2.5 'Type of Vehicle' reintroduce 'Motor Scooter' and show engine size of motorcycles.
- In 1.14 'Road Type' show cycle lane, route, etc., or new variable
- Reintroduce seat belt variable.
- Reintroduce axles on MGV and HGV's
- New variable required for traffic calmed areas – will aid evaluation of effectiveness nationally.
- New variables required for cyclists with values for use of helmet, reflective clothing, use of lights and use of/presence of cycleways and cycle lanes.
- Validation of 'Hit and Run' variable. Details of drivers sometimes available later and it would be useful if 'Hit and Run' variable could be split into:
  1. No details of driver available
  2. Details of driver available later.Also if age of driver is either estimated or known.
- Support proposed national system for collecting contributory factors.
- No problems with data transmission.

## **12. Flintshire County Council**

- No comments were made.

## **13. Glamorgan Engineering Consultancy**

- South Wales area has not yet been able to use accident data in the new 1999 format due to delays from the Police Force. Therefore, it is difficult to assess benefits at this time of the current Stats 19 system.

- Consideration of contributory factors is an important part of any investigation. The use of a unique collection system will have great benefits in statistical comparison of accident data for different areas of Great Britain and the country as a whole.
- Introduction of speed cameras
- Expanding the range of various accident remedial measures and publishing results of their effectiveness in terms of accident savings.
- The validation of damage only accident records for the Stats. 19 would benefit the accident investigation process. However, the number of those records would be difficult to manage.



## INTERIM SUMMARY OF THE MAIN THEMES ARISING FROM THE CONSULTATION RESPONSE FROM ENGLISH LOCAL AUTHORITIES

### A. RESULTS FROM QUESTIONNAIRE

One of two questionnaires was sent to every local authority in England to seek their view on their existing use of Stas19 data and any suggestions they might have for changes in the variables collected. The reason for more than one questionnaire was that one was used for London based organisations (including Boroughs) and one for the rest of England. Wherever possible the questions were arranged so that comparisons could be drawn. 83 responses were received (22 from London).

#### Q1: How often does your organisation use Stats19 data?

70 ( 84% ) said that they used the data "most days"  
8 ( 10% ) said that they used the data "about every week"  
5 ( 6% ) said that they used the data "about every month"

No organisation responding said that they used the data less frequently.

#### Q2: Is the Stats19 accident data essential for your work?

All 83 respondents said yes to this question.

#### Q3a: From whom do you receive the accidents data (Not including London).

50 ( 82% ) said that they received the data directly from the Police  
7 ( 11% ) said that they received the data from another Local Authority  
6 ( 10% ) said that they received it from Consultants  
2 ( 3% ) said from other sources.

N.B. Some Authorities received data from more than one source.

#### Q3b: In what form do you receive the data?

21 ( 34% ) said that they received the data as a police report form  
41 ( 67% ) said that they received the data as a processed computer file  
6 ( 10% ) said that they received the data in printed format

#### Q4: Do you amend the accident data that you receive?

48 ( 79% ) said that they do amend some elements of the data they receive  
13 ( 21% ) said that they do not amend the data.

#### Q5: Is local data added to the file (extra to Stats19)?

39 ( 64% ) said that they do add extra data to their file.

#### Q8: Does your organisation use Contributory Factors?

55 ( 90% ) said that they do use CF's

#### Q8b: Who selects the CF's?

54 out of the 55 said that the Police Officer selects the CF's  
5 also said that a police civilian selects the CF's

**Q9: Do you use the new DTLR CF system?**

37 said that they did not use this system.

**Q10: Would you support a National system of CF'**

52 (85% ) said that they would support a National CF system.

**Q11: Do you have a CF system you believe could be used nationally?**

14 said that they did have such a system.

**SUMMARY OF RESPONSES**

It is clear from the responses that the vast majority of Local Authorities use Stats19 data on a daily basis and that all of them believe that the information is essential to their work. The majority of Local Authorities receive their data directly from the Police and those who don't include the Metropolitan Authorities (including London) who have a central organisation interfacing with the Police and processing the data on their behalf. Most of the LA's receive the data in computerised format and those who do not receive it like this are mainly those who are responsible for entering the data on to a database themselves. The majority of local Authorities carry out some checks upon the data and these are usually related to the location of the accident. Also many Local Authorities collect information extra to the Stats19 data set and this will be examined in much more detail later on in this report. This extra data falls into two categories:

- 1) Data which the LA has themselves, usually geographical based, identifying which ward or parish the accident occurred in or whether the accident was on a Trunk Road.
- 2) Data which has been collected by the Police as a local initiative. These fields will be considered individually and the evidence should be assessed to see whether this should be expanded for national collection.

The majority of the Local Authorities would support the founding of a national system of Contributory factors but there was no agreement as to what this system should be. There were many suggestions as to what the National System should be.

***B. COMMENTS ON INDIVIDUAL ITEMS***

***1. NARRATIVE DESCRIPTION OF LOCATION AND ACCIDENT***

Many of the respondents already enter this information on to their database and there was probably some confusion as to whether this was already a Stats19 requirement. However it is clear that those LA's who do not receive such information would like to receive it and many have asked that it be added to the National data set.

***2. LOCATION OF ACCIDENT***

There were many requests for better accuracy in identifying the exact location of an accident. Linked with these requests were suggestions that new technologies should be carefully considered so as to ensure accurate grid references.

***3. ROAD CLASS***

There was a suggestion to remove the distinction between C & unclassified roads.

#### **4. ROAD TYPE & JUNCTION DETAIL**

There were several comments on the need to review the way that slip roads are dealt with. The actual definition of a slip road needed to be reviewed to cover new situations, in particular “slips” for left turns associated with roundabouts whereby vehicles never actually enter the roundabout. In this situation and motorway situations the accident may not occur at a junction. In this context it has been suggested that slip road should be removed from junction detail. There were also requests to further explain the situation when “Using private drive or entrance” should be used.

#### **5. ROAD SURFACE CONDITION**

There was a request to remove Oil and Mud from this category and include them within “Special conditions at Site”.

#### **6. CARRIAGEWAY HAZARDS**

There were many suggestions for additions/alterations to this category. The most common being the request to separate “Other animal” from pedestrians. It was also suggested that broken down vehicles should also be identified.

#### **7. PLACE ACCIDENT REPORTED**

There were many comments on this, most asking that the definition be clarified. One suggestion was that it should be “Officer visited/not visited scene”. There were also some requests that due to problems obtaining data, those accidents reported at the station should have a reduced data set to complete. However other contributors argued strongly against this.

#### **8. TYPE OF VEHICLE**

There were several suggestions for additional vehicle types to be added. These included:  
Motor-cycles (additional category for 500cc and over)  
Split Taxi and Private Hire vehicle  
Tram  
Milk Float  
Motor caravan  
Involvement of emergency vehicles (already collected by some LA's)

#### **9. VEHICLE MOVEMENT.**

**There was a suggestion that we should allow “unknown” to be entered.**

#### **10. VEHICLE REGISTRATION MARK**

There was a request for more information about the nationality of the drivers. It was suggested that country codes should be available for the most common European countries.

#### **11. DRIVER AND CASUALTY POSTCODES**

There were requests to specifically identify the country of origin for visitors.

## **C. COMMON PROPOSALS FOR NEW VARIABLES**

### **SPECIFIC THEMES**

- Seat belt use. (There were many requests for this, although there were also some who spoke against it, due to its unreliability)
- Child restraints. (Information was requested on fitting and use)
- Cycle helmet usage was requested by several and in fact a few LA's said that they already recorded such information.
- Child pedestrian accompanied
- School attended. This was mentioned by many LA's. It was appreciated that this could not be a national field, but it was requested that National Guidance could be given to Police Officers to collect this information.
- Mobile phones (Contributory factor). This came up many times, as well as other technological distractions. Some people admitted the problems in collecting the usage information and thus just wanted "mobile phone available" collected. It was also requested that pedestrian phone use be included.
- Air bag deployment. A few requested this.
- Journey purpose. This was requested by many, it should cover both drivers and casualties. It was suggested that this could be incorporated with the school journey field.
- Ethnic origin (Drivers and Casualties). This is already collected by some Police Forces. A check is required to see how many, although LA's would like greater detail, using the Home Office definitions would be acceptable. Information was requested on the ability of the person to read/speak English, although it was appreciated that this may be difficult.
- Driving licence type
- Eye sight impairment
- Accident Type. There were many supporters of having a limited number of accident types that could be coded. At least 10 LA's already do this.
- Include accidents on Service Roads (or at the very least make the definitions clearer).
- Vehicle occupancy. There was a request from one authority that we should record how many people were in each vehicle. This would
  - a) Assist in identifying overloaded vehicles
  - b) Identify how many people were uninjured
- ◆ Overtaking accidents: There were a few requests for this field to be reinstated, although it could be included within Accident Type.
- ◆ Left hand drive vehicles
- ◆ Type of PSV. Identify type of operation, e.g. tourist, limited stop, scheduled service bus.

### **DETAILED ROAD/JUNCTION LAYOUT/INFORMATION**

#### **Road and Junction layout**

- A specific category for slip roads. (A general feeling that this could be dealt with by better definitions)
- Traffic calming features.
- Advisory and Statutory cycle lanes.
- Advanced stop lines.
- Information about road/lane markings was requested

#### **Specific collision types**

- Hit traffic calming feature.
- Hit build out.
- Hit bollard.

#### **Separate values for;**

- Cycle lane on carriageway.
- Cycle track away from carriageway (currently not required unless lawful access for motor vehicles).
- Cycleway adjacent to carriageway ( currently required if cycleway on public highway)
- Shared access pedestrian/cycle way.
- Pedestrian location – on cycleway/on cycle lane/on footway.

## **B: INTERIM VIEWS ON CONSULTATION RESPONSE REPORTED TO SCRAS**

**Summary of response from road safety organisations  
consulted by A.J.Rookes**

**Summary of response from Scottish police authorities  
consulted by Supt I Wynne ACPO (Scotland)**

**Liaison Group on Road Accident Statistics - LGRAS (01) 5**

**Interim summary of the main themes arising from the  
consultation response from police forces and road safety  
organisations in England and Wales**

## SUMMARY OF RESPONSE FROM ROAD SAFETY ORGANISATIONS CONSULTED BY A.J.ROOKES

### DATA PROVIDERS

#### **1.Consultee 9. Gwent Consultancy on behalf of Gwent Consultancy, Blaenau Gwent County Borough Council, Caerphilly County Borough Council, Monmouthshire County Council, Newport County Borough Council & Torfaen County Borough Council**

- Data Coverage 1A
  - i. Variable 2.8 - Parked Vehicle requirements are completely misunderstood & are consequently very poorly recorded. Suggest single code for parked vehicle without directional definition.
  - ii. Variable 2.12 – Codes 03 & 04 are never used. Simplify to one code – parked vehicle.
  - iii. Consider introduction of additional code to Variable 2.7 – slowing.
- Data Coverage 1B
  - i. Problems with the “Place Accident Reported” item have been experienced – officers frequently say “No” although they did attend the accident.
  - ii. Wording “unless Highway” as set out in table in paragraph 2.4 of “Accidents to be Reported” – possibly change to “unless Public Highway”.
  - iii. Definitions of footway, carriageway & highway are not appreciated by some - clarification is required.
  - iv. Accidents reported at Police Stations are being badly reported – officers/civilians are not taking all details.
- Proposed National System for Collecting Contributory Factors 2A
  - i. Support the concept, but have concerns about its complexity and reliability. Simpler system currently being used in the Gwent Police Force area is poorly completed.

#### **2.Consultee 10. Denbighshire County Council**

- Data Coverage 1A
  - i. The hit & run variable does not allow for the driver being traced after the accident & details such as age & sex of driver then being obtained.
  - ii. Seat belt information is collected by North Wales Police, but it would be useful if this was collected nationally and the data made available

#### **3.Consultee 11. Wrexham County Borough Council**

- Data Coverage 1A
  - i. In 1.25 Carriageway hazard – include ‘horse’ as separate value.
  - ii. In 2.5 Re-introduce motor scooter; show engine size of motorcycles.
  - iii. In 1.14 Road Type- show cycle lane, route, etc or new variable.
  - iv. Re-introduce ‘seat belt’ variable – often requested by Road Safety
  - v. Re-instate axles + MGW for HGVs.
  - vi. New variable for traffic calmed areas – aid evaluation of effectiveness nationally.
  - vii. New variables for cyclists with values for use of helmet; reflective clothing; use of lights; Use of / Presence of cycleways, cycle lanes.
- Data Coverage 1B
  - i. Validation of Hit / Run variable; Details of driver sometimes available later Useful if Hit/Run could be split into
    - 1. No details of driver available
    - 2. Details of Driver available later.
  - ii. Also if age either estimated or known (Reduce validation queries by National Assembly for Wales).

- Proposed National System for collecting contributory factors 2A - Support it.
- Data Transmission  
No problems.

#### **4.Consultee 12. Flintshire County Council**

No comments made.

#### **5.Consultee 13. Glamorgan Engineering Consultancy.**

- Data Coverage 1A.  
The validation of damage only accident records for the Stats 19 would benefit the accident investigation process. However, the number of those records would be very difficult to manage

### **DATA USERS**

#### **6.Ceredigion County Council**

- Concern expressed that information recorded is inaccurate and sometimes contains gross errors, necessitating rigorous checks.
- Data obtained from Dyfed Powys Police
- Do not favour any additions to data collection requirements.
- Aware of e-mail in text format for other data sources.

#### **7.Rhondda Cynon Taff County Borough Council**

- Data obtained from South Wales Police via Glamorgan Engineering Consultancy.
- Would like **ALL** non PIA accidents to be collected.
- Stress that Contributory Factors are most important in accident analysis and remedial work.
- Although no additional information required it would undoubtedly be useful.
- Proposals for the addition of new variables and values (Section 4 in Scoping Review) identify potentially valuable information sets. However, is there some way of recording whether drivers are familiar or unfamiliar with an area?

#### **8.City and County of Swansea**

- Data obtained from South Wales Police.
- Would like confirmation of Speed Limit as additional road accident data.
- Aware of 4 other data sources.

#### **9.Powys County Council**

- Data is held within the Authority.

- Would like to see Journeys to and from School as additional Road Accident data to be collected.

#### **10. Bridgend County Borough Council**

- Data obtained from South Wales Police via Glamorgan Engineering Consultancy.
- No Additional Road Accident data required.
- Would favour a National Collection System of contributory factors.
- With reference to Question 6, now that the pilot scheme for the hypothecation of Speed Camera Revenue has been rolled out nationally, would like to see “before and after” comparisons of accidents at camera sites introduced as soon as enough “after” data has been collected.

#### **11. Local Government Data Unit – Wales**

- Wish to emphasise the need for residence information on drivers and casualties. See below.
- The 1997 review accepted the need for driver & casualty post code information to enhance the potential for linking road accident data with health, crime and population statistics. Post code information could usefully distinguish between local and non-locals. Has any analysis or data linkage been done? How accurate is the post coding?

#### **12. Pembrokeshire County Council**

- Data obtained from Dyfed Powys Police.
- Other data sources – Accident & Emergency Hospital Records.
- Would like the following additional data recorded
  - i. Damage only accidents (spotting potential problems).
  - ii. Use of mobile phones recorded.
  - iii. Foreign vehicles to be recorded (2 ports in Pembrokeshire and this could determine if campaign needed).
  - iv. Record if a cyclist has undergone training.
  - v. Police to input 6 figure grid references.

#### **13. Cardiff County Council**

- Are happy with the proposed content of the database, but are concerned about the quality of the data, particularly the location of accidents, road identification and descriptions of the incident. These need improvement of accuracy & content by the Police. An actual example is when the location of an accident is given as “Maes-y-Coed Road” the description as Cardiff and the grid co-ordinates do not lie anywhere near the road in question.

#### **14. Gwent Consultancy on behalf of Gwent Consultancy, Blaenau Gwent County Borough Council, Caerphilly County Borough Council, Monmouthshire County Council, Newport County Borough Council & Torfaen County Borough Council**

- Data obtained from Heddlu Gwent Police.
- Other data Sources
  - i. Hospital data (AWIS)



ii. DTLR/NAfW publications.

- Support the concept of National collection system of contributory factors, however, the current system appears to be complex, especially from the completing officers point of view. The data also needs to be reliable, which is not always the case with current local systems.
- Do not favour additional data items. The cost implications of modifications to software far outweigh any benefits gained from the extra data collected.
- The content of RAGB and Road Accidents Wales varies appreciably. Data will appear in one of these documents and not in the other, or it will be presented in an entirely different format. Consistency of presentation would assist data comparisons.

#### **15. Denbighshire County Council**

- Data obtained from North Wales Police.
- Other data sources – Hospital data.
- Agree that it would be appropriate to have a national system of contributory data and access to this system.

#### **16. Wrexham County Borough Council**

- Data obtained from North Wales Police.
- Support National Collection of Contributory Factors.
- Would like to see a national breakdown of casualties and by UA as per BVPI99

#### **17. Flintshire County Council**

- No comments were made.

#### **18. Glamorgan Engineering Consultancy**

- Data obtained from Police Force.
- Other data sources – FT65 Police booklets/direct contact with Police.
- South Wales area has not yet been able to use accident data in the new 1999 format due to delays from the Police Force. Therefore, it is difficult to assess benefits at this period of the new Stats 19 system.
- Consideration of contributory factors is an important part of any investigation. The use of a unique collection system will have great benefits in statistical comparison of accident data for different areas of Great Britain and the country as a whole.
- Introduction of speed cameras
- Expanding the range of various accident remedial measures and publishing results of their effectiveness in terms of accident savings.

## **SUMMARY OF RESPONSE FROM SCOTTISH POLICE AUTHORITIES CONSULTED BY Supt L Wynne ACPO (Scotland)**

### Introduction

The collection and analysis of road crash statistics are an essential element in the process of defining future roads policing strategy and policy both at local and national level. Statistics also provide the steer for enforcement strategy locally and underpin the targeted casualty reduction process.

STATS19 provides quality information at present to inform police forces and local authorities in order that they develop successful road safety policy programmes. However, any opportunity to enhance the quality of the system or provide information which will assist future strategy and resultant casualty reduction is most welcome.

### Consultation

As ACPO(S) representative for the Standing Committee on Road Accident Statistics (SCRAS), I have consulted with all the Scottish Police Forces to formulate a composite response to the review and particularly the proposals for change and contributory factors. Summarised comments are included in this response but I have omitted dialogue where none is required.

### The Review

The new variables adopted in 1999 are useful however the driver and casualty post code data is not providing any worthwhile linkage potential. Some forces have attempted to establish patterns in other areas of enforcement such as drinking and driving using this same method but it has not identified any trends.

The accuracy of 'place of accident' is causing concern particularly where road crashes are reported at police stations. It has been suggested that this is changed to:

- Reporting officer at locus
- Reporting officer eye witness
- Reported at police office

Little change has been reported by forces regarding any influences encountered by the reclassification of whiplash injury.

There has been no significant increase in single cycle accidents over the last few years. A change in the definition of an accident will be required if this statistic is to be adopted. It is unrealistic to expect police officers to report and record such incidents when the definition does not support it. Change requires instructional backup.

### Concerns about current reporting and coding practices

The 'place accident reported' section should be discontinued as this does not field any worthwhile information and would also prevent future reported confusion over interpretation.

Is there really a need for officers to improve grid reference information? The practical issues of police work render the provision of GPS systems to patrol officers unrealistic, not to mention the prohibitive costs involved. I am firmly of the belief that such devices would be impractical in the policing environment due to their vulnerability of manufacture and design. Also, the prospect of the new National Police Communication System (Airwave) due for two thousand and four will provide Forces with the capability of positioning officers on the ground using their personal radios. Airwave will be linked to the Scottish GIS mapping system which may plot a particular locus on instructions of officers at the scene of a road crash.

Since forces now report on a financial year basis for most of their business, it seems common sense to adopt this approach for national road accident statistics and this suggestion will be supported.

A two tier reporting system is not supported by Scottish Forces.

#### Casualty reduction targets and proposals for changes in severity definition

A change in the definition would be welcome as the present definition is too prescriptive. Seriousness of injury cannot be linked to length of stay in a hospital, therefore, further discussion is needed to establish what criteria to apply, bearing in mind that any alteration may adversely affect the current statistics and the method by which they are assimilated.

#### Proposals for the addition of new variables and values

Work related accidents and the definition need not be stringent. STATS19 already provides details of the injured party therefore identifying their activity at the time of the crash will help to formulate perhaps an education programme for those most likely to be involved in a road crash during a particular activity.

The use of mobile phones whilst driving is topical and this is why it receives such publicity. Agreed that consideration should be given to include as an additional causation factor.

Driving experience certainly impacts on perception, planning and evasive action behind the wheel, but people are so different and human nature is such that after their initial test of competence peoples experience and lifestyles vary so greatly with the passage of time that any information gathered would be worthless. Socio-economic links have also been examined in detail for other strategies but have only provided trends in specific areas.

#### Seat belt usage and air bag deployment

The inclusion of statistics for seat belt usage would be welcome as this is a core offence for strategies employed by Scottish forces to reduce road crash casualties. The inclusion would help develop enforcement procedures to reduce non compliance with the law. Officers would have to be educated regarding the collection of this information, but this is not an insurmountable task. Likewise the collection of information regarding air bag deployment will influence the severity of injury statistics, therefore would be a welcome addition to the values. A simple yes/no box recorded on forces accident systems would suffice. Some opposition was commented, but a simple question to the occupants of any vehicle would obtain the necessary information. We must apply common sense.

#### Speeding

Speeding it may be argued is by far the most common cause of road crashes, second only to carelessness on the part of a driver or pedestrian, yet it is not included in the STATS19 profile and was not adopted in the 1997 review. It is a proposed contributory factor, however, if not adopted this time around, perhaps the review may wish to examine the possibility of providing a 'probable cause' section within the STATS19 form. Guidance could be provided in the form of a common sense directive to police officers. This information would highlight not only areas but individuals who may be targeted by enforcement, engineering and education.

### Driver fatigue

This has featured lately on various motoring programmes and is a growing concern particularly in relation to work related accidents with stress being an increasing concern these days. Further discussion on this topic is needed to identify the scale of the problem and to what extent it features as a causation factor.

### Proposal to formally adopt the collection of contributory factors

All Scottish Forces but one are in favour of adopting the proposed system provided that implementation does not lead to excessive costs. Forces will include the collection process within their existing accident recording systems. In time this information will provide valuable data which can be used to influence police enforcement activity and local authority road accident prevention schemes.

Providing this data could ensure that a more focused approach is undertaken particularly on enforcement, where patterns could be identified using the available contributory factor analysis.

### International perspective and data protection

There is a need to be careful when providing details of drink driving levels and blood test results. Individual police forces may find themselves in violation of human rights or data protection legislation. Any future European data requirement will have to be closely scrutinised. As stated in the review, there have already been breaches of data protection legislation and the data protection registrar will closely monitor progress.

### Conclusion

The introduction of the contributory factors information should be relatively easy given the computer technology at forces' disposal these days.

The contributory factors summarise influences and events which impact on the cause of a road crash. The information gathered by reporting police officers could provide valuable intelligence to forward the process for intervention and remedy. Studying these factors for large numbers of road crashes will lead to improved road safety and the future reduction of injury and death on our roads.

Lawrence Wynne  
Superintendent  
ACPO(S) Representative for SCRAS  
11 September 2001

## ANNEX E

# THE 2002 QUALITY REVIEW OF NATIONAL ROAD ACCIDENT STATISTICS

## ***REVIEW OF DISSEMINATION OF AND ACCESS TO THESE STATISTICS***

This note is accompanied by a questionnaire, You are invited in Section 4 of the note to contribute to the Review by responding by email or by post by Friday 21 June 2002

### **1 Background**

1.1 The 2002 review of national statistics on road accidents involving personal injury is currently in progress, and a review team representing the interests of central and local government, as well as local police forces, is evaluating the response from the consultation exercise carried out at the end of last year. The background consultation papers relating to the review can be found on the DTLR web-site:-

<http://www.transtat.dtlr.gov.uk/scras/qareview.htm>

1.2 Those consultation papers include a project definition paper which sets out the scope of the review. That paper is mainly concerned with the data collection process and the coverage of the data to be collected, and was drawn up to help both suppliers and users of road accident data to formulate their ideas for changes, such as the case for including additional information to assist policy formulation and assessment, or removing information which has become redundant or where accurate collection has become impractical. As in the past, that is still an essential component of the review process, but this time there is seen to be a need to assess as a distinct component of the review the dissemination of and means of access to national statistics on road accidents involving personal injury.

1.3 This is because, as part of a programme to improve public confidence in National Statistics generally, the regular five yearly review of the road accident data collection process is being organised in accordance with the National Statistics Quality Assurance Programme Board guidance paper 'Commissioning a National Statistics Review', following publication of the White Paper 'Building Trust In Statistics' (which is available on the National Statistics web-site :-

<http://www.statistics.gov.uk.htm>

### **2 Review of dissemination of and access to road accident statistics**

2.1 The consultation exercise carried out towards the end of last year did in fact gather some general views, from both suppliers and users of national road accident data, about published statistics. It also asked for suggestions about how statistical publications could be improved. A general picture emerged that most respondents were very frequent users of national road accident statistics because it was essential for their work, and that the statistics were a unique data source. However the consultation did not pick up many ideas for improving specific publications or improving access to road accident statistics.

2.2 This further consultation exercise about the dissemination and accessibility of national road accident statistics is intended to cover only the statistics produced by the Department of Transport, Local Government, and the Regions (DTLR), the National Assembly for Wales (NAW) and the Scottish Executive (SE). This will be a

principal input to the review of dissemination and access, which is chaired by Professor Richard Allsop from the Centre for Transport Studies at University College London, who has been appointed as the independent assessor for the 2002 quality review programme of national road accident statistics.

2.3 The DTLR is currently investigating the feasibility of a new series of outputs providing national quarterly estimates of road accident statistics, in order to provide information on key trends more quickly. Figures provided would include estimated casualty numbers for different road user groups and children and estimated accidents by road type. If initial checks are satisfactory, these will first be implemented as an experimental series<sup>1</sup>, published on the DTLR Internet site and also linked to the National Statistics site. Hard copy versions will also be made available. A decision will be made this summer.

### **3 Aims of the review of dissemination and access**

3.1 The broad aims of this review are:

- To obtain indications of the level and frequency of use of the principal DTLR, NAW and SE publications which contain road accident statistics.
- To receive and consider suggestions for modifications to existing publications which, by way of example, could include:-
  - Different analyses for specific road user groups or road accident types
  - Different use of graphics and tables
  - Changes in the balance between time-series and detailed analysis for the most recent year
  - Links to road accident statistics or research results in other publications
  - Links to statistics of exposure to risk or to other background data
- To examine the case for additional publications such as topic based fact sheets or more information for regions or local authorities.
- To examine the scope and content of the current first releases of road accident statistics.
- To obtain indications of awareness of the availability of road accident data in SPSS format from the UK Data Archive.  
(<http://www.data-archive.ac.uk>)
- To consider how web based publication of and access to road accident statistics can be best developed.

3.2 The intention is to assess to what extent the DTLR, NAW and SE publication effort is meeting user demand and to identify the scope for useful improvement having regard to the associated resource implications.

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<sup>1</sup> Experimental statistics are in the testing phase and are not fully developed. They allow information to be available to users whilst methodology is under development. After an appropriate time period a decision is made on their future status.

3.3 In doing so, the review will take into account the need for exercise of professional statistical judgement in the compilation and issuing of the statistics, constraints which may arise from considerations of data protection, and the need, within the current or any future level of resources, to allocate effort among requests for information which range from school project work to parliamentary questions, and from single numbers to massive arrays of data. Constructive comment on these issues will be welcomed.

#### **4 Invitation to respond and timetable for response**

The attached questionnaire is designed to gather user views about publications of road accident statistics for Great Britain, Scotland and Wales. It will be sent to all known recipients of the publications and to other known users of the data. **It will also be mounted on the web at <http://www.transtat.dtlr.gov.uk/scras/gareview.htm>, from which the questionnaire can be downloaded and returned by e mail to Peter.Wilding@dtlr.gsi.gov.uk.**

Responses based upon, but not confined to, the questionnaire should please be returned by **Friday 21 June** but earlier replies would be helpful. Electronic versions of the questionnaire can also be obtained by contacting the following e-mail address:-

**Peter.Wilding@dtlr.gsi.gov.uk**

**Hard copy replies should be sent to:**

**Peter Wilding  
Review project Officer  
DTLR  
Great Minster House  
Zone 2/14  
76, Marsham Street  
London SW1P 4DR  
Tel: 020 7944 4926**

**3 MAY 2002**

**Response to review of dissemination of and access to road accident statistics**

**If you need more space for any question, please continue on a separate sheet**

<b>Question 1</b> Which of the following publications do you use to obtain road accident statistics and how often?			
Please tick appropriate box for each publication	Frequently	Occasionally	Never
Road Accidents Great Britain : The casualty report			
Road Casualties Great Britain: Main Results			
Transport Statistics : Great Britain			
Road Accidents Scotland			
Key Road Accident Statistics (Scotland)			
Scottish Transport Statistics			
Road Accidents : Wales			
Road Casualties in Wales			
Welsh Transport Statistics			
Others (please say which)			

<b>Question 2</b> Do you access these publications in printed form or on the web?			
Please tick appropriate box for each publication you use	Wholly or mainly in printed form	Both to a substantial degree	Wholly or mainly on the web
Road Accidents Great Britain : The casualty report			
Road Casualties Great Britain: Main Results			
Transport Statistics Great Britain			
Road Accidents Scotland			
Key Road Accident Statistics (Scotland)			
Scottish Transport Statistics			
Road Accidents : Wales			
Road Casualties in Wales			
Welsh Transport Statistics			
Others (please say which)			



**Question 3** Why are the publications that you use important to you?

**Question 4** If you think that any specific publications could be improved please provide details and make it clear to which publications you are referring.

(a) improvements in content

(b) improvements in presentation

**Question 5** Are there additional forms of publication which you would find useful? Please provide details and indicate the reasons for your suggestions.

<b>Question 6</b> Some particular substantive full-year statistics are first released in early publications prior to issue of the main annual publications. Is the coverage of the early publications appropriate for your needs?		
Please tick appropriate box for each publication you use.	Yes	No
Road Casualties in Great Britain		
Key Road Accident Statistics (Scotland)		
Road Casualties in Wales		
<b>If no, please describe what information you would like to see there</b>		

<b>Question 7.</b> Were you aware before reading this note of the availability of road accident data from the UK Data Archive?		
Please tick box	Yes	No
<b>If yes, please comment on this facility if you wish to</b>		

**Question 8.** If you use the internet to access publications of road accident data, in what ways do you think the websites you use could be improved in design to facilitate access? Please make clear to which site(s) you are referring

**Question 9** Would you find either of the following two facilities useful? Please make clear to which publication(s) and website(s) you are referring, and if you would like time series, for how many years back.

(a) to be able to download tables from publications as Excel spreadsheets

(b) to be able to download time-series of tables that appear year by year in publications

**Question 10** If you think that there are other ways in which access to road accident data could and should be provided via the web please provide details.

**Question 11** Are there any other comments you would like to make?

<b>Question 12- Please select the user category which best describes your function.</b>	
Please tick box	User
Central Government or its Agencies	
Police Force	
Local Authority	
Research Organisation	
Road Safety Organisation	
Consultancy	
Individual Researcher	
Member of the Public	
Other (please specify)	

If you would like us to be able to contact you about your response, please insert your contact details

Name

Address

e-mail address

phone

fax

**E mail replies should be sent to:**

**Peter.Wilding@dtlr.gsi.gov.uk**

**Hard copy replies should be sent to:**

**Peter Wilding  
Review project Officer  
DTLR  
Great Minster House  
Zone 2/14  
76, Marsham Street  
London SW1P 4DR  
Tel: 020 7944 4926**

**3 MAY 2002**

**The quality review of national road accident statistics, including the dissemination of and access to these statistics is expected to conclude in the spring of 2003. A final report will be available on the web site :**

<http://www.transtat.dft.gov.uk/scras/qareview.htm>