

**Road casualty reduction campaign in
Great Britain from 1987 to the
year 2000: Implications for the
Republic of South Africa**

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**ROAD CASUALTY REDUCTION CAMPAIGN IN GREAT BRITAIN FROM 1987
TO THE YEAR 2000: IMPLICATIONS FOR THE REPUBLIC OF SOUTH AFRICA**

C.J. Steenkamp

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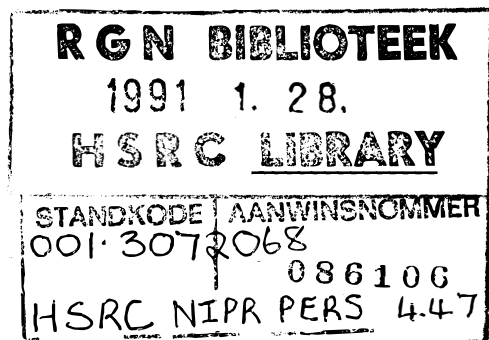
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PREFACE

Approximately five thousand people die annually on the roads in Great Britain. As a result the British Government decided in 1983 that something should be done and decided to review its road safety policy. A working group was appointed under chairmanship of Dr North. The task of the working group was to consider what action was required to ensure a downward trend in the number of road casualties. As a result of the findings of the working group, a massive undertaking took place to reduce the road casualties by at least one third at the end of the century. Information about the precautionary measures that were introduced could be of tremendous value for the Republic of South Africa. This report is an overview of the undertaking in Great Britain and is intended as a guide for the RSA in its own efforts to reduce road casualties. Although the RSA has fewer inhabitants than Great Britain its annual road casualties are more than twice as high. The RSA could almost certainly learn something from their experience.

I would like to thank the Executive Management of the HSRC for the grant that allowed me to undertake study leave to write this report on one of the many interesting subjects I had the privilege to study during my leave.

I also want to thank Norah Haussmann who solved some language problems and the Centre for Language Services of the HSRC who has been responsible for editing the report.



C.J. STEENKAMP



EKSERP

Gedurende 1983 het die Britse Parlement besluit om die beleid ten opsigte van padveiligheid in Groot Brittanje te hersien. 'n Werkgroep onder voorsitterskap van dr. North is aangestel waarin vyf staatsdepartemente verteenwoordig was. Die hele spektrum wat verband hou met verkeersveiligheid is aangespreek. 'n Reeks voorstelle is deur die werkgroep gemaak ten opsigte van voetgangers, fietsryers, motorvoertuie, voertuigbestuurders, verkeersveiligheidsadvertensies, dronkbestuur, wetgewing en navorsing. Daar is ook ten doel gestel om die aantal ongevalle teen die einde van die huidige eeu met ten minste een derde te verminder.

Van die belangrikste aspekte wat aandag ontvang het en wat veral vir die RSA van waarde kan wees, is die volgende:

- * Aandag is op die hoogste vlak aan padveiligheid gegee.
- * Die mobiliteit van die voetganger word sterk beklemtoon.
- * Baie klem word geplaas op navorsing ten opsigte van menslike gedrag. Daar word tot die gevolgtrekking gekom dat dit noodsaaklik is dat deurlopend aandag hieraan gegee moet word.
- * Voorlopige resultate van navorsing toon dat padveiligheidsopvoeding deel van die skoolkurrikulum moet wees.
- * Die belangrikste doelstelling wat nagestreef moet word, is dat klem geplaas word op die voortdurende bewusmaking van die probleem nie net op alle terreine van die samelewing nie, maar ook op parlementêre vlak.

ABSTRACT

During 1983 the British Government decided to review the road safety policy for Great Britain. A working group under chairmanship of Dr North was established. Five state departments were represented in this working group. The total spectrum of the road safety field received attention. A series of proposals with regard to pedestrians, cyclists, motor vehicles, drivers, advertisements, drunken driving, legislation and research were made. The objective was that casualties should be reduced by at least one third towards the end of the century.

Some of the most important aspects that received attention and that could also be of value to the RSA are the following:

- * Road Safety receives attention at the highest level.
- * The mobility of the pedestrian is greatly stressed.
- * Much emphasis is placed on research in regard to human conduct, and it was concluded that it is necessary to give continual attention to this matter.
- * Preliminary results of research indicate that road safety education should be part of the school curriculum.
- * The main aim to achieve is to place emphasis on the continual awareness of the problem, not only on all aspects of society but also on government level.

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1. INTRODUCTION

During 1983 the British Government decided to review its road safety policy. The task of the working group was to take stock of what had been achieved so far and to consider what action was required to keep the number of road casualties as low as possible for at least the remainder of the present century. Some of the departments represented in the working group were *inter alia*: Transport, Health and Social Security, Education and Science, Trade and Industry, Home Office and Treasury. The initial meeting was chaired by the then Minister of the Department of Transport and subsequent meetings by the Under-Secretary, Road and Vehicle Safety, of the Department of Transport. Three key considerations were taken into account, namely:

- (a) No increase in overall resources available for road safety should be assumed and therefore obtaining the maximum value for money from existing activities and future proposals would be of the greatest importance.
- (b) In examining future options, measures which involved the imposition of new legislative controls on road users, except where unavoidable, should not be introduced.
- (c) Whilst having due regard for the limits of practical and political reality, the review should not fail to address the key issues that arise in the task of reducing road casualties and should identify radical solutions where appropriate.

Three years of work have left the working group satisfied that there is no simple formula for solving the problem of road accident casualties. Members of the group came to the conclusion that it was a problem that was rooted in the attitudes and values of both the individual and the community as a whole.

The working group also came to the conclusion that the value of the exercise lay in the opportunity it provided to look at the fundamental issues underlying the road casualty problem. The working group believes that false optimism is of no use to the cause of road safety. It is only through clear understanding of the nature of the road casualty problem, and a realistic appreciation of the gains that could be expected from different types of approach, that one stands to achieve a material impact in the years ahead.

The report brought out by the working group is known as the "North Report". Some of the most valuable findings of the "North Report" that might also be applicable to the situation in South Africa are reported in the following paragraphs.

2. CONSTRAINTS

Four particular constraints that have their roots deep in both the psychological make-up of the individual and the values of society as a whole were identified. The conclusion was drawn that these constraints must be addressed before realistic policies for the reduction of road casualties could be formulated. Because the

constraints are not readily removable their continued existence must be taken into account in the preparation of detailed options.

The four constraints are the following:

(a) Limitations in knowledge

It is clear that there are no new solutions to road safety problems simply waiting to be introduced. Therefore, progress in the short term will depend upon those well-established measures which have convincingly proved themselves as an effective aid to casualty reduction. To identify new solutions for the longer term, research and experiments must be undertaken. Road safety measures need to be fully developed and evaluated before they are implemented on a national basis. There is a lack of knowledge on the means of directly influencing human behaviour, on the relative accident liability of different types of road users, and on the complex interaction between mobility, traffic management, speed, accidents and casualties. Nothing is known about public attitudes to road safety or about the means of influencing these attitudes.

(b) Society's indifference

Society does not seem to regard the reduction in the number of road casualties as a matter of grave concern. This emerges clearly from a variety of significant indicators. A few examples are the following:

1. There has been no government White Paper on road safety since 1967.
2. Within the Department of Transport the promotion of road safety does not easily make headway in the face of other objectives and competing claims for limited resources.
3. Road safety officers and their departments do not occupy high positions in the hierarchy of local government.
4. Road safety scarcely receives any attention from industry or the trade unions.
5. Road safety has failed altogether in capturing the imagination of the media as an issue of continuing national importance.
6. The issue of road safety appears not to be regarded by opinion forming circles, i.e. politicians, political observers, the pressure groups, the media, as a particular interesting or important one.
7. There is a lack of sustained interest in road safety on the part of the public in general. There is an absence of serious public concern about the issue.
8. The vast majority of individual road accidents make little impact as items of news.

9. There is a fatalistic attitude that accidents on the road are a long-standing and inescapable feature of a motorized society. Changing the abovementioned climate of opinion presents a real challenge. Ultimate success probably depends mostly on stimulating greater interest in road safety within national political circles, local government, the relevant professions, industry and the national media on the grounds that these groups are most likely to influence the perceptions of society as a whole. A separate requirement should look more closely at the attitude of the general public.

(c) Individual values

The crucial question is how much are people prepared to pay or how much time will they sacrifice in order to avoid an accident. Road safety ultimately comes at a price. As far as the individual road user is concerned, the price may be a purely financial one, for example to fit extra safety features to a vehicle. More often the price takes the form of a sacrifice in respect of the road user's mobility such as a restriction on his speed of travel, a less direct route, a longer wait at a junction or foregoing the use of his car when he consumes alcohol. For the pedestrian, it might mean walking further in order to use a safe crossing, and for the motor cyclist it might mean confinement to a machine of limited power until he could handle it safely. The individual road user therefore has to decide how far he is prepared to accept limitations in mobility in order to use the roads in safety. There is a good deal of evidence to suggest that people's perception of risk is often wildly distorted. There is a belief that accidents only happen to other people. The view that accident risk is one which simply has to be accepted may well help to explain why, for example, people continue to put up with the dangers of motor cycling or why motorists find it so hard to break the habit of drinking and driving.

Trying to establish individual attitudes is a task of immense difficulty which underlines the need for systematic attitude research. Road safety measures of any kind cannot be assumed to meet with ready acceptance from the public if the measures are perceived as involving a significant sacrifice in mobility. This phenomenon can be observed in virtually every area of road safety activity: in the everyday behaviour of road users, whether on wheels or on foot; in their reluctance to heed safety advice or in their readiness to infringe existing laws in the absence of strict enforcement and in their suspicion of proposed new measures. The significance of all this is twofold:

(i) any new road safety initiative which involves restrictions on road users will give rise to major problems of public acceptability, and

(ii) attempts to impose drastic limitations on mobility in the interests of safety are almost certainly doomed to failure.

Government (central and local) ought to take every opportunity to place the dilemma squarely before the public in order to encourage debate on, and understanding of the arguments involved and the choices available. Government can also seek to ensure that its own

policies do not include an automatic weighting in favour of mobility at the expense of safety in situations where the two are in conflict. This will be of particular importance where the mobility interests of the motorized road user group are at odds with the safety interests of the vulnerable non-motorized groups, i.e. cyclists and pedestrians.

(d) **Misconceptions**

False perceptions and half-truths are deeply entrenched in sections of the road safety world at both national and local level. For instance there is a deeply entrenched belief in the road safety world that substantial progress in road safety must ultimately depend on programmes of road user education, training and publicity, notwithstanding the fact that such measures have not, by any objective standard, so far proved themselves as effective aids in casualty reduction, and indeed may well never accept such proof. In contrast to this, the very real results that can be achieved by other measures, particularly in the field of safety engineering, are not sufficiently well understood. Too much detailed information on accident causation and solutions is confined to research literature that is not readily understood by some of those working in the field of road safety, let alone a wider audience.

It can be concluded that education and training of road safety practitioners are clearly necessary if the road casualty problem is to be properly understood and misconceptions set aside. The full facts on the means of reducing road casualties must be made better known to those working in the field and expertise exchanged between them much more readily than at present. Boundaries within local government, between planners, engineers, educationists and road safety officers, need to be broken down and a more integrated approach adopted.

3. OVERALL OBJECTIVE

- (a) The overall objective that was set was to reduce casualties to two-thirds of their current level by the end of the century, through the sustained application of existing measures (including newly developed measures not yet fully applied); and
- (b) to seek further reductions beyond those in (a), by the identification of new measures and the creation of a climate of opinion and understanding which is more sympathetic to the effective promotion of road safety.

4. THE PROGRAMME

The working group saw the key task of the programme as being the substantial reduction of the number of casualties among vulnerable road users, i.e. pedestrians, cyclists and motor cyclists, on roads in urban areas.

The key strategy to be pursued is the redirection of available resources towards existing and potential measures which are demonstrably cost-effective in terms of casualty reduction.

The concept of cost-effectiveness in road safety should not rest upon the supposition that saving money is more important than saving lives.

Implementation of the programme should proceed along the following lines:

4.1 Knowledge

Establish to the maximum possible extent with the support of non-government finance, an increased and sustained level of research and development in the field of road safety, covering in particular

4.1.1 relative accident liability;

4.1.2 the relation between mobility, traffic management, speed and accidents;

4.1.3 the means of directly influencing road use behaviour;

4.1.4 measures to counter drinking and driving;

4.1.5 public attitudes towards road safety as it affects the individual road user and as an issue for society; and

4.1.6 the cost-effectiveness of measures for reducing casualties.

4.2 Stimulating public opinion

4.2.1 Seek to raise awareness of road safety as an issue of national importance within political circles and the media.

4.2.2 Encourage debate and better understanding of mobility versus road safety among individuals, society, transport campaigns and road safety practitioners.

4.2.3 Provide better information to road safety practitioners on available casualty saving measures and their relative cost-effectiveness.

4.3 Central government policies

4.3.1 Seek to reduce the level of central government resources devoted to road safety functions that are not demonstrably cost-effective in casualty reduction, for example the paid advertising programme of the Department of Transport.

4.3.2 Encourage research to build safer vehicles especially pedestrian-friendly car fronts.

4.3.3 Promote the cause of low-cost safety engineering in every possible way.

4.3.4 Enhance the importance attached to casualty savings as against time savings in setting priorities for the national roads programme.

5. RECOMMENDATIONS

Within the framework of the above, the following specific measures were recommended to the abovementioned ministers:

5.1 Road safety education in schools

There is a need for an in-service teacher training and support scheme for road safety education. A pilot project should be established in one or more local education authority areas.

5.2 Road user training

- (i) Development of a traffic club for children aged 3 to 5 years.
- (ii) Research should take place on the means of training children aged 10 to 12 years in safe road crossing behaviour.
- (iii) The complete Cycleway scheme should be relaunched by ROSPA (The Royal Society for the Prevention of Accidents) in conjunction with education authorities.
- (iv) Encourage driving instructors to develop better training methods and to improve the quality of instruction. Driving should be taught as a life skill and not merely as a means of passing the driving test. It could be a precursor to the introduction of a more rigorous test.

5.3 Road safety publicity

The Department of Transport should, as quickly and as far as practical and political restraints allow, withdraw from its traditional programme of paid advertising, other than for the purpose of making essential information known to the public, for example, on legislative changes. In its place there should be wider-ranging promotional activities with the emphasis on increasing public awareness of road safety in general. Such activities should be undertaken in close co-operation with local authority associations, and the private sector and should be funded primarily from outside government. Public funds released as a result of this change of approach should be directed towards the implementation of demonstrable cost-effective methods of casualty reduction and towards research on effective means of influencing road user behaviour.

5.4 Driver licensing and testing

- (i) The long-term behavioural research programme should include work to identify means of improving the driver's attitude and roadcraft skills and of assessing these through a testing regime.
- (ii) Continued effort must be made in conjunction with the motoring organizations and insurance companies to increase the number of persons taking advanced driver training courses and testing.

5.5 Vehicle licensing and testing

- (i) There is a need to explore the scope for using insurance companies' data to identify vehicles and drivers with above average accident

risk, both to assist in the development of road safety policy and to help reduce insurance costs.

- (ii) The annual vehicle inspection systems should continue to be reviewed regularly, in order to ensure that they remain broadly effective and efficient.
- (iii) The effectiveness of the police vehicle defect rectification scheme should be monitored.

5.6 The effect of age, ill-health and drugs

- (i) High risk groups should be persuaded to declare their condition to the licensing centre.
- (ii) The Snellen Wall Chart vision testing should be considered once the international standard has been agreed on.
- (iii) Advice and assistance to elderly drivers should be considered.
- (iv) The police and courts should be encouraged to refer drivers with possible medical or physical problems for medical assessment.

5.7 Drinking and driving

- (i) Research on the identification of effective measures to counter drinking and driving should continue to be given high priority.
- (ii) A close watch should be kept on the experience of those countries which have introduced a lower limit for young or inexperienced drivers.
- (iii) The effect of behavioural rehabilitation programmes for drinking and driving offenders should continue to be studied.
- (iv) Publicity strategies on drinking and driving should be reviewed in the light of the new approach to publicity.
- (v) There should be continued contact between appropriate bodies at national and local level with the aim of maximizing the scope for integrating measures against drinking and driving.

5.8 The law

The following is a summary of the proposals made in the government's White Paper, "The Road user and the Law."

5.8.1 Main driving offences

- a. The present "reckless driving" offence does not operate satisfactorily and ought to be replaced with an offence based more firmly on the observable standard of driving and less on the driver's state of mind. The new law will have two components: the standard of driving must fall far below that expected of a competent and careful driver; and the driving must make possible a danger of physical injury or serious damage to property and is likely to be known as "dangerous driving".

The maximum penalty will be two years imprisonment and an unlimited fine (at present it is six months and £ 2 000). Disqualification will be obligatory in all cases and not discretionary.

- b. The present offence of causing death as a result of reckless driving will be replaced by causing death as a result of dangerous driving. The maximum penalty will be five years' imprisonment, disqualification for a minimum period of two years and an unlimited fine.
- c. The lesser offence of driving without due care and attention or without due consideration for other road users, namely careless driving, will be unchanged.
- d. These offences will be extended to include other places than the road to which the public has access like car parks.

5.8.2 Endangerment

A new regulation will be introduced to deal with the person who interferes with equipment relating to traffic regulations, or who deliberately causes an obstruction on the road in a way which could cause injury or damage. The maximum penalty for this malicious type of offence will be seven years' imprisonment.

5.8.3 Driving while unfit

The present offence of driving while unfit as a result of drink or drugs will be extended to include drivers who are unfit to drive as a result of any other medical condition, including temporary conditions such as sleepiness or fatigue.

5.8.4 Drunken driving

- a. There will be a new offence, namely causing death as a result of careless driving while unfit because of drinking, using drugs or other forms of medical incapacity. This will make it possible to deal more severely with drunken drivers who drive badly and cause a death. The maximum penalty will be five years' imprisonment, an unlimited fine and obligatory disqualification for at least two years.
- b. Changes will be made to the high risk offenders' scheme which deals with drivers whose dependence on alcohol presents a serious road safety risk. The scheme will include all drivers who have been convicted once for driving with a blood alcohol level two and a half times or more than the legal limit, or who have committed two drunken driving offences within ten years, or have been disqualified for refusing without reasonable cause to supply a blood specimen for analysis. These drivers will have to satisfy the Medical Branch of the Driver and Vehicle Licensing Centre that they do not have a drinking problem before they are allowed to drive again.
- c. Insurance policies which protect drunken driving offenders from the consequences of disqualification are to lapse under an agreement reached with the Association of British Insurers. No new policies will be issued and existing policies will lapse by the end of 1990.

5.8.5 Retesting and rehabilitation

- a. Following a period of disqualification drivers convicted of certain road traffic offences will have to pass a new, longer and more demanding driving test before they are allowed back on the road.
- b. The new test will be introduced for the most serious offenders and in time also for those disqualified on account of other offences.
- c. The court's power will be extended so that those convicted of drunken driving will be made to attend rehabilitation courses.

5.8.6 New technology

- a. New proposals will be put forward to enable the more effective use of new technology to detect speeding and slight traffic offences. Arrangements will be made to ensure that the equipment is accurate and reliable and that satisfactory procedures are developed for its use.
- b. Other areas in which the new technology could assist, are the providing of information on driver's licences.

5.8.7 Other areas

Apart from the above several other proposals were also made, some of these are the following:

- a. Authorized police officers will be given the power to prohibit the movement of unsafe vehicles.
- b. More use of short-term disqualification will be encouraged in cases where only fines and penalty points are imposed at present.
- c. The maximum penalty for failure to stop after, and failure to report an accident will be increased to include imprisonment for six months.
- d. Penalty points will no longer be automatically removed from a driver's licence after a period of disqualification has lapsed.
- e. The penalty points for speeding offences dealt with by a court will be increased from 3 points to a new range of 3 to 6 points.
- f. If, for special reasons, disqualification is not imposed when it would normally be obligatory, the number of penalty points will be increased from the present fixed number to a new range of 3 to 11 points.

5.9 The role of the police

The value of traffic policing as an aid to casualty reduction needs to be better understood. A research project to assess the effect of different levels of law enforcement on accidents and driver behaviour ought to be undertaken.

5.10 Vehicle construction standards

- a. The voluntary use of child restraints and rear seat belts should be actively encouraged and monitored. As soon as the general climate of opinion and the extent of voluntary use favour it, it should be made mandatory.
- b. Continued attention should be given to the scope for improved car design, for example side impact protection and steering wheel improvements. High priority should be given to the introduction of the pedestrian-friendly car front.
- c. The safety of motorcycles should be improved by the use of antilock brakes, daytime lights, leg guards and air bags.

5.11 Highway engineering

- a. There should be a shift in emphasis away from time saving towards casualty savings. Schemes should be ranked in such a way that those with the highest casualty reduction are handled first.
- b. A system should be established of formal safety checks to establish the need for remedial measures and to assess whether expected casualty reductions from improved design standards have in practice been achieved.
- c. Local authority associations should be invited to take part in a major study on the promotion of local safety engineering. This would cover the availability of data and the need for exchange of information and advice between authorities.
- d. There is an urgent need for greater awareness among councillors and senior officers of the value of low cost engineering yielding qualitative high return, and for a pool of trained staff with expertise in the field. Results should be made widely available.

5.12 Motorcyclists

Effective inducements must be identified for learners to take formal training. The possibility of a more demanding learner's test should be explored.

5.13 Cyclists

- a. Research should be undertaken to produce new advice on the negotiation of roundabouts for cyclists.
- b. Information should be offered to cyclists on the relative effectiveness of conspicuity aids.
- c. The possibility of formally advising cyclists to wear helmets should be considered once a new standard for helmets is agreed upon and its effectiveness established.

5.14 Pedestrians

Pedestrians should be taken into account at the earliest stages of road building and improvement and traffic management schemes because they are co-equal road users. This is particularly significant in urban areas. Steps to achieve these objectives are the following:

- (i) Research should be undertaken on ways of measuring pedestrian activity.
- (ii) Clearer distinction between distributor roads and residential streets should be made.
- (iii) There should be a major research programme on the use of techniques for improving pedestrian mobility and safety.
- (iv) There should be a manual of advice on pedestrian safety with particular emphasis on the scope for planning and engineering solutions.
- (v) Public debate should be stimulated on the question of using road engineering to reduce vehicle speeds in residential areas and also on routes to schools.
- (vi) Research should be undertaken on the possibility of relaxing the criteria for the provision of, and providing new advice on the siting of additional crossing points. (It needs mentioning that zebra and pelican crossings are obeyed by the motoring public in Great Britain. The cars stop even when pedestrians are approaching a crossing).
- (vii) Research on road crossing skills for ten to twelve-year-olds should be undertaken.
- (viii) The scope for enhancing awareness of pedestrian needs in driver and rider training and testing should be actively explored.
- (ix) Additional research on the factors in pedestrian accident causation, conspicuity and the role of alcohol and drugs should be undertaken.
- (x) The establishment of pupil crossing patrols should be investigated in collaboration with local education and highway authorities.

5.15 Central government

All government departments with an interest in road safety should have specific objectives in respect of their contribution to casualty reduction.

5.16 Local government

A circular should be issued advising local authorities on the effective administration of their road safety responsibilities and giving guidance on the casualty-saving benefits of alternative measures.

The role of the road safety officer associations ought to be expanded, in particular by taking over a greater share of responsibility for national publicity activity.

5.17 Other organizations

The government can help prepare the ground for an effective road safety lobby by stimulating public awareness of and debate on the casualty problem. Possibilities to be explored include encouragement of companies to make accident prevention part of their management interests and persuade insurers to adapt approaches which more directly encourage good driving and discourage bad driving.

5.18 Future research

The total resources available for road safety research should be increased by about 40 %. The following major projects should be undertaken.

- (a) The role of human behaviour in accidents and the means of influencing or constraining it.
- (b) Means of successfully exploiting urban traffic management to minimize casualties.
- (c) An expanded programme of road user, vehicle and safety research should be undertaken.

5.19 Economic assessment and the value of life

- a. The value of life should be increased by the same proportion as the planned increase in the value of time.
- b. The values attached to the cost of serious injuries should be increased once research has established the scale of long-term disability and its costs both direct and indirect in terms of pain; grief and suffering.
- c. The value of life should also be increased to reflect the empirical evidence obtained and the commitment to casualty reduction proposed in the "North Report".

6. REPORT AFTER TWO YEARS OF IMPLEMENTATION

In this paragraph an overview is given of the situation of the second full year since the announcement was made in July 1987 by the Secretary of State that a target was set to reduce road casualties by one third by the year 2000.

6.1 The statistics

The baseline for the target was the average of figures for the period 1981 - 1985. Table 1 shows the position which should have been reached given a steady decrease leading to the overall target for the year 2000 and the actual results achieved.

TABLE 1

THE CASUALTIES FOR GREAT BRITAIN FOR THE YEAR ENDING MID-1989

	Baseline	Assuming steady reduction (Approximate target by mid 1989)	% change on baseline	Actual	% change on baseline
Deaths	5 600	5 320	-5 %	5 050	-10 %
Serious injuries	74 500	70 775	-5 %	63 400	-15 %
Slight injuries	242 000	229 900	-5 %	250 000	+5 %

The figures in Table 1 must be seen against a continuing traffic growth of 25 %. The performance so far in reducing deaths and serious injuries must be attributed to increased awareness of the problem rather than specific new measures because many of the new measures announced need more time for their impact to be assessed. The increase in slight casualties seems likely to be directly related to increasing traffic and congestion.

6.2 New initiatives in Great Britain

The following new initiatives are planned in the main priority areas of urban safety and vulnerable groups:

- 6.2.1 Guidelines for local highway authorities on the development and application of techniques developed by the Transport and Road Research Laboratory (TRRL) in the Urban Safety Projects.
- 6.2.2. Research will be done on the wider issue of safe speeds, the control and enforcement, and the relation with casualty reduction.
- 6.2.3. The relaxation of the road hump regulations will lead to further consideration of sub-30 mph (48 km/h) areas.
- 6.2.4. A policy in respect of the elderly as a vulnerable road user group will be developed. This will include a package of targeted measures to help them.
- 6.2.5. Further measures for reducing casualties among children, with particular emphasis on child cyclists, will be prepared.
- 6.2.6 A policy in respect of vision and driving will be developed. This will include vehicle and road design aspects.
- 6.2.7. The Local Authority Associations produced the following Road Safety Code of Good Practice. (Local Authority Associations, 1989):

PLANNING

- (1) All Local Authorities, whether or not they have a statutory responsibility for road safety, should specifically consider how they are able to assist in reducing road casualties through their statutory functions and local influence.
- (2) All Local Authorities should adopt, publish and regularly review a strategy for assisting road casualty reduction in their area.
- (3) In developing and reviewing the strategy consultation should take place with the Police and other Local Authorities involved with the area.
- (4) Where Local Authorities have statutory responsibility for road safety, the strategy should be more comprehensive and comprise a Road Safety Plan.
- (5) The Road Safety Plan should identify target reductions in casualties which the strategy is intended to achieve over a specified period related to the resources provided.
- (6) The Road Safety Plan should take account of all programmes and services which have potential for affecting road casualties.
- (7) The information and management systems outlined in the 'Guidelines for Accident Reduction and Prevention' published by the Institution of Highways and Transportation are commended to Local Highway Authorities as a minimum requirement on which to base their accident reduction programme.

INFORMATION

- (8) Road accident data should be supplemented by traffic and appropriate demographic information.
- (9) Local Highway Authorities should consider obtaining supplementary information from local hospital records particularly in respect of pedestrian and cyclist casualties.
- (10) Local Highway Authorities should, in co-operation with the Police, monitor the accuracy of injury accident data and introduce improvements where necessary.
- (11) Local Highway Authorities should adopt standards for the application of accident investigation procedures based upon those identified in this Code of Good Practice.
- (12) Subject to the requirements of confidentiality all relevant road accident data together with appropriate interpretation should be available by Local Highway Authorities at minimum cost to all parties for the purpose of assisting in casualty reduction.
- (13) Local Highway Authorities should take all reasonable steps to publicize the location and nature of high risk sites.

- (14) All Local Authorities should support priorities being given to identified casualty reduction measures.

ENGINEERING

- (15) Road safety benefits should not be arbitrarily ascribed to schemes where no objective assessment has been made or where such benefits are insignificant compared to the overall cost or other objectives.
- (16) All staff involved in the design and implementation of highway improvements, maintenance works and traffic management schemes should have an understanding of casualty reduction principles and easy access to relevant data.
- (17) All highway schemes should be subject to safety checking by staff not associated with the original design both before and after construction.
- (18) The principles of safety checking should also be applied to new development affecting the highway.
- (19) Road accident data, together with appropriate interpretation should be readily available to all Members and staff who are involved in the approval of scheme priorities and programmes.
- (20) The budget of each highway scheme should provide for all temporary signing together with relevant publicity and educational material.

EDUCATION AND TRAINING

- (21) Local Education Authorities should encourage the incorporation of a planned and co-ordinated road safety education programme within the curriculum of all primary and secondary schools.
- (22) Road safety educational programmes should be related wherever possible to local circumstances and environment.
- (23) Specific responsibility for road safety education planning and co-ordination should be included within the responsibilities of at least one staff member at every school.
- (24) Road Safety should be incorporated within the initial training of student teachers and available as in-service training.
- (25) Guidelines should be made available on expected knowledge and levels of attainment on road safety education.
- (26) "Safer Routes to School" projects should be encouraged.
- (27) The recommended criteria should be used in evaluating the requirements for School Crossing Patrols.
- (28) School Crossing Patrols should be provided with sufficient training to enable them to supply regular reinforcement of road safety principles to children.

- (29) *School Transport Contracts should specify special signing arrangements and safety requirements when children are boarding, travelling or alighting, together with a Code of Conduct for Drivers.*
- (30) *All Local Authorities should possess and make available on request information on the local availability of road safety educational material and road user training schemes.*
- (31) *Safety equipment, including conspicuity aids and safety seats should be readily available for purchase or loan.*

ENFORCEMENT

- (32) *Each Police Authority should adopt and regularly review a road safety policy and Police operational objectives for casualty reduction should be co-ordinated with Local Authority Road Safety Plans.*
- (33) *Enforcement implications should be taken into account in the design of highway improvement and traffic management schemes.*
- (34) *Wherever possible programmed enforcement action should be planned in conjunction with, and supported by, the Local Highway Authorities.*
- (35) *Local Authorities should support the Police in the introduction of technological aids to traffic law enforcement.*
- (36) *Local Authorities should support the extension of Driver Rehabilitation Schemes.*

ENCOURAGEMENT

- (37) *Local Authorities should make maximum use of their influence in support of road safety promotion.*
- (38) *Local Authorities should actively discourage drinking and driving at all Civic and Departmental functions.*
- (39) *Local Authorities should identify improvement targets for road accidents involving their own vehicles.*
- (40) *Local Authorities should encourage safe driving practices amongst all employees.*
- (41) *All vehicles owned or operated by Local Authorities under contract including public and school transport, should be maintained to the highest standards of safety and supplied with appropriate safety equipment.*

CO-ORDINATION OF RESOURCES

- (42) *Local Highway Authorities should ensure co-ordination between the various disciplines involved.*
- (43) *Local Highway Authorities should establish a central accident investigation unit.*

- (44) *Arrangements for interaction and interchange of accident investigation and road safety education staff should be established.*
- (45) *The importance and status of casualty reduction work should be recognised in particular by the support of training and qualification.*
- (46) *In considering staff levels for accident reduction Local Highway Authorities should have regard to the guidelines identified in this Code of Good Practice.*
- (47) *Where Road Safety Committees and support groups are established their role and effectiveness should be reviewed within the context of the Road Safety Plan.*
- (48) *Opportunities for introducing private sector finance into casualty reduction measures should be fully explored.*
- (49) *Appropriate monitoring facilities should be established to assess the effectiveness of casualty reduction schemes and the information made available through local and national liaison arrangements.*

6.3 Some highlights of the implementation to date

- (1) The first monitoring report on the pilot study of introducing road safety education in schools is expected at the end of 1991.
- (2) A regional traffic club for 3-5 year-olds is to be launched early in 1991.
- (3) Advanced driver training is already being promoted by the permanent display of posters in driving test centre waiting rooms.
- (4) The Association for Driver Instructors (ADI) revised their information leaflet to propagate quality training and improved testing.
- (5) A predriver training video was launched on 24 January 1989 "Street Sense".
- (6) There was growing support from the private sector in advertising (including TV commercials).
- (7) The Association for British Insurance Companies (ABI) completed a statistical survey of accident claims in April 1989.
- (8) Press notices were issued on road safety and heart conditions, diabetics and eye-sight. New arrangements for research on epilepsy are on the way.
- (9) The courts and the police were asked to step up efforts to notify persons who are disabled not to drive. Guidance to courts on their existing duty is in preparation, especially on alcohol-related disability.

- (10) Roadside surveys on drinking and driving are continuing. New changes in the law are on the way (see Paragraph 5.8.4).
- (11) The use of rear restraints for children has been made compulsory since 1 September 1989.
- (12) Discussions are under way with other European Economic Community (EEC) Countries to secure necessary international agreement for the building of safer vehicles. Modified technical specifications have been completed for several of the proposals made in the "North Report" (see paragraph 4.3.2).
- (13) A package of measures for improving motorway safety was announced in April 1988.
- (14) An advisory note about the way in which safety checks could be undertaken on roads is nearly completed.
- (15) A report on a study of local safety engineering has been completed.
- (16) Preparation for the introduction of stiffer road tests for motorcyclists has been nearly completed.
- (17) A draft regulation for the compulsory training of motorcyclists from June 1990 has been completed.
- (18) Accompanying road tests for motorcyclists have taken place since October 1989.
- (19) A proposal for a separate licence category for machines over 4000 cc was announced as part of EEC harmonization.
- (20) A national publicity campaign on the conspicuity of cyclists was launched on 30 October 1989.
- (21) Cyclists' helmets according to specified standards are available. The use of these helmets is being publicized. A video is being developed for use in schools.
- (22) Implementation of a pedestrian safety package is due to be completed by the Spring of 1990.
- (23) Various research projects on pedestrian activity, including accident causation studies and studies of pedestrian risk perception are presently being undertaken.
- (24) Proposals for a pedestrian safety management study have been agreed upon and approved for inclusion in TRRL's 1990/91 programme.
- (25) Research reports on accident predictive models and pedestrian flow predictions at crossings were submitted during February and March 1989. Predictive models are to be introduced as part of the research programme continuing to 1992. This should lead to advice to local authorities on criteria for the provision of crossings.
- (26) Pupil crossing patrols shall not be implemented.

- (27) During the driver test more emphasis will be placed on awareness of pedestrians. A draft syllabus for driver training was published during 1989.
- (28) A pilot study of 60 pedestrian accidents was completed during 1989.
- (29) An additional £600 000 (+ R2 640 000) was transferred from publicity to research in 1988/89. Further transfers are planned for subsequent years.
- (30) Behavioural studies are under way at several universities and research institutes.

7. A CRITICAL COMPARISON OF THE BRITISH ROAD CASUALTY REDUCTION PROJECT WITH THE PRESENT SITUATION IN SOUTH AFRICA

During 1985 the death rate on the RSA roads per 100 million kilometres driven was in the vicinity of 12. Compared with that of the United Kingdom, it is four times higher than their index which is less than three. If actual figures are compared the situation is as follows: In Great Britain 5 052 people were killed on their roads during 1988. In the same period more than twice this number was killed on the roads of the RSA while the total population of Great Britain is more than the total population in South Africa.

The present road safety projects undertaken or given attention to in South Africa compare very favourably with those recommended by the "North Report". In fact, South Africa is well ahead of Great Britain in certain respects. The question is: What can we learn from their experience?

In my opinion the following are important differences between our campaigns and theirs.

(1) THE RSA DOES NOT VIEW THE SITUATION AS SERIOUSLY AS DOES GREAT BRITAIN

Attention at the highest level was given to road safety. Although the death rate on the roads of Great Britain compares very favourably with that of the other EEC countries, in fact it is the lowest per 100 000 of the population, the government decided that this matter was important enough to give attention to and ordered an indepth study of the situation. Five thousand deaths annually on the roads was not acceptable to the British Parliament. In the RSA with fewer inhabitants and vehicles on the roads more than 10 000 deaths are acceptable. Except for the National Road Safety Council (NRSC) and a few researchers at universities and research institutes, nobody in the RSA seems to care very much.

(2) THE RSA FOCUSES ITS ATTENTION ON MOBILITY AT THE EXPENSE OF HIGHER CASUALTY RATES

After reading the "North Report" one comes to the conclusion that in the RSA, overemphasis is placed on mobility. Large sums of money are spent by the Government on freeways, on shorter faster routes and even on research work to build still better and faster roads

that could handle the ever-growing number of vehicles safely at high speeds, and to develop tar or cement mixtures of better quality for paving purposes. Little attention is given to pedestrians and their mobility. This is usually left to local governments to solve. Even local governments tend to give more attention to the flow of vehicles than the safety and the mobility of pedestrians. Pedestrians must look after themselves; their lives are their own responsibility. On the other hand provision is made for the fast flow of traffic in and out of cities. It seems as if the honour of the city engineer is at stake if there are traffic jams in his city. Vehicles have hooters with which motorists can express their frustrations but the pedestrian cannot stand and shout to get rid of his frustrations and could easily put his life at stake when crossing a street where no provision is made for this purpose. Government or local authorities could easily build a new freeway or street for fast moving vehicles with fences on both sides in existing urban areas making only provision for vehicles to cross and do not give a thought to pedestrians who are less mobile. If the pedestrians want to cross the freeway or street on a legal way, they sometimes will have to walk several kilometres. Casualty reduction must receive the same priority as mobility and not less.

(3) THE RSA NEEDS TO PLACE MORE EMPHASIS ON RESEARCH INTO HUMAN BEHAVIOUR

In Great Britain more emphasis is placed on research, especially in the field of human behaviour, changing of attitudes and pedestrian movement and mobility. The British realized that the human factor is responsible for more than 90 % of the casualties. Money is even rechannelled from advertisements and publicity to research on human behaviour. They also see the need for ongoing research in this field and are aware of the fact that suitable solutions cannot be found overnight.

(4) EVALUATION OF EXISTING SCHEMES

In Great Britain existing schemes must be evaluated in the light of maximum value for money in reducing casualties.

(5) MORE PUBLICITY IS REQUIRED IN THE RSA

Perhaps the most important aim set by the "North Report" is that there should be continuing emphasis on actions and awareness, not only throughout the road safety field but also in parliament, the mass media, the private sector and in schools.

(6) INTRODUCTION OF ROAD SAFETY EDUCATION IN SCHOOLS

If the results of the present experiment of introducing road safety as part of the curriculum are positive, then road safety will be introduced in the curriculum in all schools in Great Britain.

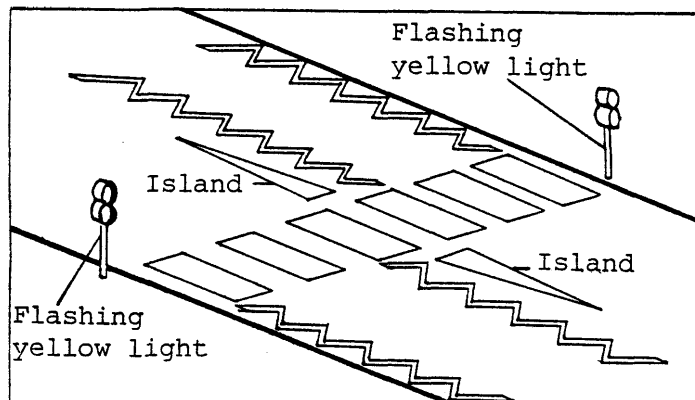
(7) SCHOLAR PATROLS PLAY A VITAL ROLE IN THE RSA

One cannot say that scholar patrols in South Africa are not cost effective in the sense that they save lives, because they decided in Great Britain not to introduce pupil crossing patrols. There might

be a lesser need for such patrols in Great Britain because of the following factors:

- (i) Pedestrian crossings are strictly adhered to by motorists and in Great Britain are safe places to cross a street. Motorists stop when a pedestrian is even only approaching the pedestrian crossing. In the RSA, with the exception of a few towns in Natal and the Cape Province, pedestrian crossings are one of the most dangerous places to cross a street. Even if you are in the middle of the street on a pedestrian crossing, vehicles pass behind and in front of you at high speed. The disrespect with which pedestrian crossings are treated in general in the RSA is a serious accusation against the total road safety system, this includes government, courts, law enforcement, driver education, training and testing and last but not least the NRSC. If the government could only show a little interest in this serious problem it might strengthen the hand of people devoted to road safety and even work through to the road users.

In Great Britain pedestrian crossings are usually made highly visible with zig-zag lines along the side of the road and flashing yellow lights to make them more visible at night as in the sketch:



(ii) The general speed limits in residential areas and specially near schools are lower in Great Britain (48 km/h) than in South Africa (60 km/h).

(iii) In areas where there are no subways or zebra crossings, traffic officers do point duty.

(8) RSA CYCLISTS ARE STILL NOT VISIBLE ENOUGH

Much emphasis is placed on the visibility and safety of cyclists. Reflecting material and reflectors for rider and bicycle are encouraged. Reflectors on the spokes of wheels increase the visibility of bicycles very much. The wearing of safety helmets is also encouraged. Pupils ought to be taught from a very young age that they are much safer if they can be seen by the motorists.

(9) OTHER FACTORS

It could be argued that there are other factors as well that could possibly contribute to the higher casualty rate in South Africa.

(i) The general speed limits in Great Britain are lower on rural roads as well as on dual carriageways, namely 48 km/h in rural areas, 96 km/h on ordinary single carriageways and 112 km/h on dual carriageways, unless signs indicate a lower local limit.

(ii) The layout of many towns in Great Britain is such that excess speeding is not really possible.

(10) CENTRAL GOVERNMENT NEEDS TO BE INVOLVED IN LAW ENFORCEMENT

In South Africa traffic law enforcement and the practical application of road safety is the responsibility mainly of the provincial administrations and local governments. This could be the reason why central government has not shown much interest in this field in the past.

8. RECOMMENDATIONS

In the light of the recommendations made in the "North Report" and the extraordinary high accident rate in South Africa compared with Great Britain the following recommendations are made:

8.1 GREATER STATE INVOLVEMENT

Greater awareness of interest in and sympathy for the subject should be created by the central government; road safety and the legal promotion of it should at least be debated once a year by parliament. The appropriate person to undertake this important task ought to be the Minister of Transport. As the casualty rate has long ago reached epidemical dimensions there ought to be close co-operation between him and the Minister of Health. As a meaningful number of the casualties on the road are caused by persons purposefully violating the law, the Ministers of Justice and Police ought to have an interest in the topic as well. Other state departments that should also be interested in

road safety are the Departments of Education and the Departments of Agriculture, Industry and Commerce and Defence.

8.2 INCLUSION OF MEMBERS OF STATE DEPARTMENTS ON THE NRSC COUNCIL

A close look should be taken at the composition of the council of the NRSC. Perhaps senior members of the abovementioned State departments should also be included in the council (at least on a Deputy Director General level).

8.3 A SHIFT IN EMPHASIS FROM TIME SAVINGS TOWARDS CASUALTY REDUCTION

Persons responsible for all new developments and planning of roads, residential areas, industrial areas, etc. should give at least equal attention to the mobility of pedestrians and vehicles. A shift in emphasis away from time savings towards casualty savings is of the utmost importance for the Republic of South Africa if we want to make any progress in the reduction of casualties.

8.4 MORE EFFECTIVE PEDESTRIAN CROSSINGS

Serious attention should be given to pedestrian crossings. First of all there should be safe places to cross a road, they should be conspicuous to the vehicle driver and the pedestrian should have right of way. The number of pedestrian crossings should be increased considerably.

Secondly, every local authority should implement a programme for the advancement of pedestrian mobility and safety.

Thirdly, other methods for safe pedestrian crossing should be implemented where zebra crossings are no longer practical.

8.5 CYCLISTS MUST BE MORE CONSPICUOUS

The conspicuousness of cyclists at night should receive high priority.

8.6 ROADWORTHINESS OF VEHICLES

The periodical testing of vehicles for roadworthiness should also receive high priority.

8.7 ROAD SAFETY AS PART OF THE SCHOOL CURRICULUM

The introduction of road safety as part of the syllabus of all school subjects is strongly recommended. The great number of casualties no longer allows the education departments to leave road safety out of the curriculum.

8.8 THE ROLE OF THE PRIVATE SECTOR

The interest of the private sector as well as the media in the advancement of road safety should receive high priority. Money spent by the private sector to promote road safety should be taxfree. Money could be spent in the form of advertisements, grants for road safety research (that could be distributed by the NRSC to research institutes and universities), training centres or facilities for driver training for the public (and not only for own drivers) and any other method. Other

methods could be the funding of pedestrian crossings, subways or bridges, the distribution of reflecting materials such as reflectors for the wheels of bicycles or reflecting belts and straps for pedestrians and cyclists at night or any other method approved by the NRSC. Tax reduction ought to inspire the private sector to be very creative, specially if it could advertise their product at the same time. This ought to help stimulate the public's awareness of the importance of road safety.

8.9 THE ROLE OF THE PRIVATE SECTOR

As in Great Britain, more money should be made available for research on human behaviour, attitude changing, views of road users and the mobility and needs of residents where new developments will take place. Studies on human behaviour and attitude changing are seen by the "North Report" as long-term research because the working group realises that the human factor is responsible for more than 90 % of the casualties and that solutions cannot be found overnight.

8.10 TAKE ADVANTAGE OF GREAT BRITAIN'S RESEARCH

The NRSC should make money available for a regular study of the progress made and positive results obtained in Great Britain as a result of this most important undertaking to decrease casualties by one third at the end of this century.

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