

**Department of the Environment**

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The Chief Executive	Your reference
County Councils (England)	
Greater London Council	Our reference RS 29/1/0166
London Borough Councils	
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District Councils – for information	

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Dear Sir

**DUTY OF LOCAL AUTHORITIES TO PROMOTE ROAD SAFETY**

1. Local authorities will be aware that section 8 of the Road Traffic Act 1974 was brought into operation on 1 March 1975 by Commencement No 1 Order made on 10 December. The effect was to replace the former permissive powers of certain local authorities to promote road safety with a statutory duty to carry out local road safety work in the manner prescribed by the Act. This circular offers advice to local authorities on the exercise of this duty and is particularly directed to those whose experience of work in this field has been limited. Conversely it is of less direct application to London, where long-standing arrangements of the kind required by section 8 were not disturbed by local government reorganisation in 1974. This Circular also consolidates and amends where necessary advice given in Circulars Roads 14/69, 14/70 and 39/73 all of which are now cancelled.

**LEGISLATIVE FRAMEWORK**

2. Section 8 of the Road Traffic Act 1974 amends section 38 of the Road Traffic Act 1972, so that each local authority is required to prepare and carry out a programme of measures designed to promote road safety, and is empowered to make contributions to the cost of measures for promoting road safety taken by other authorities or bodies.

3. Subsection (2A) of section 38 of the Road Traffic Act 1972 as provided by section of the Road Traffic Act 1974, requires that in pursuance of the above duty local authorities -

(1) shall carry out studies into accidents arising out of the use of vehicles on roads or parts of roads, other than trunk roads, within their area;

(2) shall in the light of those studies, take such measures as appear to the authority to be appropriate to prevent such accidents, including the dissemination of information and advice relating to the use of roads, the giving of practical training to road users or any class or description of road users, the construction improvement, maintenance or repair of roads for which they are the highway authority and other measures taken in the exercise of their powers for controlling protecting or assisting the movement of traffic on roads;

(3) in constructing new roads, shall take such measures as appear to the authority to be appropriate to reduce the possibilities of such accidents when the roads come into use.

4. By virtue of section 186 of the Local Government Act 1972, the duties and powers specified in section 38 of the Road Traffic Act 1972, as amended, are exercised by county and metropolitan county councils and by the London authorities. However, by virtue of section 101 of the Local Government Act 1972, county and

metropolitan county councils may enter into agency arrangements with district councils for the discharge of any of their functions.

## **EFFECTIVE USE OF AVAILABLE RESOURCES**

5. The guidance given by Circular 171/74 on the need to restrict local authorities' expenditure and manpower requirements in 1975/76 makes it clear that this is not an opportune time for the assumption of new functions and the Department recognises therefore that local authorities may be constrained in the resources they can at present commit to work on the promotion of road safety. But road accidents cause 7,500 deaths and 350,000 injuries a year, at a cost to the community of £700 million, and without assiduous action both locally and nationally this waste of life and resources is likely to increase. The Authorities are therefore urged to take the largely hidden cost of road casualties into account in weighing the conflicting claims of different services.

6. On reorganisation some local authorities anticipated the enactment of section 8 in the restructuring and staffing of their highways departments; but others may be less well placed to expand road safety under present restrictions. In either case they will recognise the need to use their resources in a way that will give the best return for expenditure. Annex 1 (which is largely based on earlier circulars) is intended to help local authorities to understand how their activities fit in with action by other organisations, so that effort may be concerted. Publicity and road user training both warrant greater emphasis. The Department's national publicity is directed to fields where it appears to be most productive; local authorities arranging for complementary publicity and training in their areas will be able to obtain advice from the Royal Society for the Prevention of Accidents.

7. Annex 2 outlines an empirical approach to the promotion of road safety programmes, explaining current thinking on some of the many factors contributing to road safety. One of the most important of these is the small road improvement scheme. The Department wishes to stress the value it places on such schemes, based on detailed accident study. They produce great savings at little cost to justify high priority in local authorities' road safety programmes. Road works for which there are emotional local pressures often fail to save as many accidents and to produce as good economic returns as schemes less in the public eye. But to identify the most profitable locations for road improvements means careful and detailed accident analysis, a study of individual problems and the evaluation of options. If authorities temporarily have spare staff capacity available in consequence of the reduction of capital expenditure on highways they may consider whether such staff could usefully undertake investigation and planning work of individual problems as an investment for the future. Indeed the carefully selected remedial work itself might well be undertaken at very small expense to other highways work, for it is not universally appreciated what a minute proportion of total highways expenditure such works take. Advice on the likely savings in life and resources to be achieved from these schemes and methods of determining investment levels are given in Annex 3, which deals with the preparation of road safety policies and programmes.

8. The Department has set up a Steering Group to study the revision of the accident report form Stats 19 and the logic of accident data recording and processing locally.

9. Expenditure on the study of road accidents and the carrying out of programmes of remedial measures of an engineering, publicity and training nature is eligible for Transport Supplementary Grant (within the general Rate Support Grant system) in accordance with the arrangements set out in Circulars 104/73, 27/74 and 60/74.

Yours faithfully

V G CURTIS  
Assistant Secretary

NOTE: Any telephone enquiries on this circular should be made to RSTL Division 01 834 8540 Extn 402.  
Distribution enquiries to 01 212 4944.

## **STAFF TRAINING AND LIAISON WITH OTHER BODIES**

### **ROYAL SOCIETY FOR THE PREVENTION OF ACCIDENTS (RoSPA)**

1. Local government reorganisation and the imposition of new duties upon local authorities by the Road Traffic Act 1974 required a change in the role and organisation of RoSPA. The Secretary of State's former agency agreement with RoSPA has accordingly been replaced by a new agreement more suited to the present circumstances. This provides for a reduced RoSPA territorial organisation but a strengthened central organisation, which in consultation with the Secretary of State, will be responsible for research and development in local publicity and in road user training. In particular it will pay attention to methods of designing and evaluating local publicity and training schemes, and will suggest ways and means of improving them. On behalf of the Secretary of State RoSPA will also provide training facilities for local authority road safety staffs at all levels. Under the new agreement RoSPA will be available to advise the Department and local authorities on policies and programmes for the phased reduction of road accidents within the general framework on Transportation Policies and Programmes.

2. The Department will continue to make a substantial grant to RoSPA and trusts that local authorities will also support the Society both by way of membership and by the purchase of the publicity material, teaching aids and so on required for local publicity campaigns. In particular the Department hopes that local authorities will adopt the various RoSPA national training schemes wherever appropriate.

### **THE POLICE**

3. Close co-operation with the police continues to be essential. In order to study road accidents thoroughly, local authorities need access to police accident records, including the statements of witnesses and those involved in the accidents; these are the only sources of clues to some accident factors but they may not be available until any proceedings have been completed. The Department has set up a working party of interested bodies to look into the logic of accident data recording at local level.

4. Many local accident problems can only be solved by a mixture of engineering, education and enforcement measures. The police should, therefore, be closely associated with the problem solving process. Some police forces are setting up traffic management sections and these can contribute experience relevant to the prevention of accidents. Given their many contacts with road users the police can also support local authorities' efforts in the publicity and road user training fields. However, it is essential that the road safety work of local authorities' staff and the police should be planned jointly and integrated into a single programme.

### **ROAD SAFETY EDUCATION IN SCHOOLS**

5. The education of the young to take care of themselves and others on the roads continues to be of the utmost importance and local programmes of road safety education in schools should receive a high priority. To be effective these need to be continuous; annual or termly visits to schools by road safety and police officers are insufficient in themselves but give full value only if they are part of coordinated effort by qualified teaching staff. Local authorities should therefore give every encouragement by schools to arrange continuous road safety teaching programmes and ensure that there is a teacher in each school who is responsible for these. The road safety officer will need to provide teachers with specialist advice, local information on the factors involved in child accidents and supporting material.

## **PUBLIC INVOLVEMENT**

6. Proper analysis of the local accident situation and programming of remedial action greatly simplifies the handling of complaints about alleged local danger spots, because most of the information required to deal with these is available without further detailed study. It is possible to inform the complainant of the facts sooner and to give information regarding the relative priority of the problem. But in order not to distract staff engaged on analysis and remedial programming, many local authorities find it advantageous to have a separate officer handling complaints; he should pass information received from complainants to those responsible for analysis.

7. In order to reduce to the minimum uninformed pressure for the less economically viable schemes it is essential to ensure that there is full opportunity for public participation in the preparation of policies and programmes for the phased reduction of road accidents. It is necessary to consult with local communities as well as district councils. Given his many contacts with the press and the public, the road safety officer operating in close liaison with the planners and engineers is well placed to carry out this work.

8. It is vital to maintain the interest and enthusiasm of local communities for local safety education and training schemes. When the county council does not enter into a formal agency arrangement with district councils, it should consider setting up area road safety committees serviced by an area road safety officer.

## **PUBLICITY CAMPAIGNS**

9. Government publicity is designed to change attitudes and behaviour in ways which evaluation shows to be effective. Local authorities will be kept informed of national campaigns and will be consulted whenever the need arises, eg where the national publicity would benefit from local support.

## **COURSES AND OTHER GUIDANCE**

10. The Department will continue to maintain close liaison with local authorities. As foreshadowed in Circular 39/73 the Department's Road Safety Units are in process of closure, but advice will continue to be available from its Regional Controllers (R&T) and the RoSPA territorial office.

11. Draft copies of the Accident Investigation and Prevention manual foreshadowed in Circular 39/73 have now been distributed to local authorities having section 8 duties. In collaboration with RoSPA it is planned to extend this manual to cover the Design and Evaluation of Local Publicity and Road User Training Schemes. The Department will continue to hold its well established courses for local authority engineers on the Techniques of Accident Investigation and Prevention at its Training and Conference Centre, Cardington, Bedfordshire. Details of this course are available from the Department (RSTL Division) on request. In collaboration with the Department RoSPA are preparing a new course on the Design and Evaluation of Local Publicity and Training Schemes. It is intended that guidance on applied techniques of statistical evaluation and interpretation will form an integral part of the course and work on the development of a suitable methodology continues.

## **LONDON AUTHORITIES**

12. In London the Greater London Council and the London Boroughs have concurrent duties and powers to promote road safety. In practice some aspects of the road safety task (eg accident study for Greater London as a whole) are exercised by the GLC and others (eg local publicity and training) by the boroughs. The police and others concerned are represented on committees dealing with the various aspects of road safety.

## AN EMPIRICAL APPROACH TO THE PROMOTION OF ROAD SAFETY PROGRAMMES

### INTRODUCTION

1. A road accident may be said to occur when a road user fails to cope with his environment, the latter being taken to include everything which impinges or fails to impinge upon the consciousness of the road users. Therefore there are two approaches to reducing the risk of road accidents:-

- (1) The environment may be changed in such a way as to reduce the severity of the problems faced by the road user.
- (2) The road user's ability to cope with these problems may be improved by the provision of information and practical training and in the ultimate by enforcement.

### CHANGING THE ENVIRONMENT

#### Major road works

2. While major road works make a substantial contribution to reducing accident risks, they are seldom economically justified on these grounds alone. Moreover, because they tend to generate additional traffic they frequently do not reduce the absolute number of accidents to the degree expected. For this reason they are not widely regarded as a cost effective means of dealing with problems solely related to the prevention of accidents.

#### Small road improvement schemes

3. It is impossible to assign a single cause to road accidents, which are random multifactor events. The factors interact in a complex manner and each does not contribute a fixed element or risk. Reducing the risk attributable to one factor leads to a reduction in the risk attributable to the remainder. Therefore the aim is to identify one or two factors common to a substantial proportion of the accidents in a cluster and to treat these by way of small road improvements.

4. Small road improvements fall into two broad categories: those which seek to raise generally the design standards at the site; and those which simply seek to reduce the risk of recurrence in one or two selected accident factors. Raising design standards generally is usually much more expensive than treating one or two accident factors selected as a result of detailed study. Moreover evaluation of a substantial number of road improvement schemes has shown that the raising of design standards generally is much less likely to achieve a reduction in accidents than are less expensive schemes which seek to treat carefully selected accident factors. Therefore the raising of design standards generally is not widely regarded as a cost effective means of dealing with sites where the problem is solely one of preventing accidents.

### PROGRAMME OF SMALL ROAD IMPROVEMENT SCHEMES

#### Mass programmes

5. It will often be found that certain factors are common to groups of accidents scattered widely throughout an area – for example, skidding, darkness, nose to tail collisions with vehicles waiting to turn right from a main road, overshooting a give-way line, misjudgment when restarting from a give-way line. These are factors for which there are well tried remedies, so that once the sites have been identified by analysis of the recorded accident data little or no detailed accident study is required in order to prepare programmes of treatment. Consequently, the overhead costs of such schemes are relatively small and the programmes easy to manage.

### **Route programmes**

6. It sometimes happens that certain routes through a county or certain radial routes into towns and cities exhibit a higher than average accident risk when compared with similar roads and conditions. In these circumstances better results can usually be achieved by a coordinated programme of small road improvements and publicity along the entire route rather than by sporadic treatment of certain sites.

### **Neighbourhood programmes**

7. Particularly in older towns and cities there are some neighbourhoods which have a higher than average density of accidents although the individual clusters may be quite small. Here again better results may be obtained from a coordinated programme of small road improvements and publicity than can be obtained from sporadic treatment of certain sites. Quite often such programmes can be related to general improvement areas.

### **Single site programmes**

8. After accounting for the sites included in the foregoing special programmes there will be a substantial number of sites requiring individual treatment. These will normally be widely scattered throughout the county, and a programme will be required to deal with them in order of priority. Quite often these sites require intensive study in order to identify common accident factors susceptible to inexpensive remedy.

### **Improved signing programmes**

9. A recent study in depth of over 1,000 accidents by the Transport and Road Research Laboratory revealed that in about 5% inadequate or badly sited signs were present and could reasonably be assumed to be a factor. Analysis of accident clusters may reveal an obvious need for attention to signs (eg overtaking accidents on a bend where the double white line criteria are met) but the more subtle and less easily recognised effects of poor signing ought not to be overlooked (eg hesitation and confusion from lack of continuity of good direction signs; single vehicle accidents associated with poor lane and edge lining.) Although proper priority should be given to marking hazards, care is needed to avoid the devaluation that follows over-proliferation if warning signs are provided in response to emotional appeals. Traffic signs need to be considered as an integral part of any large or small scheme at an early stage. This is particularly important where traffic management measures are involved. Sophisticated management schemes which cannot be conveyed simply by standard prescribed signs are unlikely to be effective or safe. Brining direction signing up to the modern standard set out in the Traffic Signs Manual and subsequent relevant Roads Circulars should be a phased programme giving precedence to primary routes and other busy traffic routes. The programme needs to be planned in close association with neighbouring highway authorities to ensure consistency and regular adaptation to meet changed road patterns.

### **Speed limit review programmes**

10. The Department's speed limit policy is set out in Circulars Roads 10/69, 75/70 and 17/73 which give advice on the implementation of the policy, and set criteria which will enable local authorities to identify stretches of road on which speed limits will be of real value, and the levels at which these should be set. The Department's aim is a consistent pattern of realistic speed limits throughout the country. Such limits make the greatest contribution to accident prevention when they are set at levels which the majority of drivers will respect and which will enable the police to enforce them.

### **Programmes for the protection of pedestrians**

11. Physical aids for the protection of pedestrians are discussed in the Department's Manual on Pedestrian Safety. These fall into two broad groups: a. the segregation of pedestrians and vehicular traffic by careful planning, using pedestrian precincts, separate pedestrian ways and guard rails; and b. the provision of special crossing facilities such as zebra crossings, pelican crossings and pedestrian phases at traffic signal controlled junctions. The analysis of local accidents will identify the ways in which the local arrangements for the

protection of pedestrians require strengthening, and enable suitable programmes of remedial action to be drawn up.

## **ROAD USER PUBLICITY PROGRAMMES**

12. Local publicity programmes fall into two categories: a. those which aim to provide road users with essential local information related to the use of local traffic management schemes, parking facilities, places and periods of high risk and so on; and b. those which aim to change road user attitudes and behaviour to the specific local risks revealed by local accident analysis. The former is a straightforward public relations exercise using well established principles. The latter is a more complex process requiring understanding of human motivation and of principles of behaviour modification.

### **Changing road user attitudes and behaviour**

13. The evaluation of past publicity campaigns together with research within the fields of psychology and sociology shows that road user attitudes and behaviour can be changed by publicity, provided that there is a predisposition to change on the part of the road user concerned. His readiness is strengthened if the message is clearly seen to be applicable to him so that it is to his advantage to respond to it. Hence publicity should be directed to local risks which can be easily recognised by the road user once his attention is drawn to them. His response will depend upon the conciseness and clarity with which information on how to deal with these risks is presented.

14. However, the person needs to be heavily exposed to the chosen media if his attitudes and behaviour are to be successfully changed. It is for this reason that local authorities working on restricted budgets and without access to the mass media are advised to concentrate upon one selected group of road users in one selected area at a time. A series of small concentrated schemes can of course be programmed over a suitable period of time. It has been demonstrated that lightweight and diffuse publicity schemes are ineffective.

15. It is easier to influence the behaviour of road users when stationary (eg to fasten a seat belt or adjust a mirror) than it is to influence behaviour when moving (eg to adopt a certain overtaking procedure or maintain a proper separation distance.) This is not to say that there should not be experimentation with the latter type of publicity, but every scheme should be carefully evaluated in order to assess its effectiveness and obtain the information required to improve future schemes of this kind.

16. General exhortations such as "Mind how you go" and "Mind that Child" have not been found to be a satisfactory means of influencing road user attitudes and behaviour. The recipient of the message needs to be clearly told precisely what to do and how to do it. The more specific the message the better. Such gimmicks as pencils or paper serviettes carrying vague messages like "Take care on the roads" or "Have you taken the Cycling Proficiency Test?" are of minimal value.

17. The more personal the method of communication the more successful it is likely to be. A talk to a group of road users is more likely to be effective than a poster message; personal instruction is likely to be more effective than group instruction. But the more personalised the method of communication the more restricted is the audience which can be reached with the same resources. Consequently posters and newspaper advertising together with the occasional well chosen gimmick will remain important forms of communication. The proper balance between these various forms of communication, having regard to the resources available, can only be determined locally by experimentation and continuous evaluation.

18. The evaluation of past national publicity campaigns suggests that the effect of publicity reaches its peak in about three to four weeks, after which decay sets in, although this may taper off before reaching the original level. This suggests that local campaigns should be arranged in monthly bursts.

## **ROAD USER TRAINING PROGRAMMES**

19. Road user training programmes fall into three broad categories: a. those which aim to provide the road user with the basic skills required, eg the instruction of learner drivers or young cyclists; b. those which aim to

change attitudes and behaviour, eg driver improvement classes and pre-driver training in schools; and c. those which attempt to achieve both objectives simultaneously, eg driver training in schools using a vehicle.

20. Evidence suggests that courses which provide instruction in basic skills are effective when properly designed. But there is evidence from America and the Salford experiment to show that courses which aim to change attitudes and behaviour may lead to a further increase in basic skills without necessarily leading to an increased reduction in accidents.

21. Recent research suggests that the reason why attempts to change road user attitudes and behaviour have not been particularly successful in reducing accidents among those taking part, lies in the fact that the aim of such courses has been to persuade road users not to take risks. The underlying presumption is that road users are fully aware of the risks, but evidence suggests that accidents arise because the road user concerned is unable to recognise the rapid build up of risk as it takes place. This suggests that those courses which seek to change road user attitudes and behaviour as opposed to providing basic skills should be radically reappraised, and fresh approaches to the problem developed and carefully evaluated. Further advice on methods of evaluation is given at Annex 3.

## **PREPARATION OF POLICIES AND PROGRAMMES FOR THE PROMOTION OF ROAD SAFETY**

### **SMALL ROAD IMPROVEMENTS BASED ON DETAILED ACCIDENT STUDY**

#### **Essential parameters**

1. To prepare realistic and cost effective policies and programmes of small road improvements based on detailed accident study it is necessary to establish three local parameters:

- (1) the proportion of accident locations which are susceptible to treatment by inexpensive small road improvements;
- (2) the average accident reduction likely to be achieved at the locations so treated;
- (3) the average benefit-cost ratio likely to be achieved.

2. Often it will not be possible to establish these local parameters until the first phase of programmes has been carried out and properly evaluated. Therefore, when preparing the initial programmes it will be necessary to make certain assumptions regarding parameters. The experience of the Department's Road Safety Units and certain local authorities who have already carried out similar programmes suggests that the following values of the three parameters may be assumed in the absence of more precise local data:

- (1) approximately one-third of all accident locations are susceptible to treatment by inexpensive small road improvements based on detailed accident study;
- (2) a one-third reduction in accidents may be expected on average at the locations so treated;
- (3) a discount benefit-cost ratio of 4 to 1 may be expected on average (approximately equivalent to a first year rate of return of 50%).

#### **Accident reduction target**

3. Assuming the values of the parameters given at 2(1) and 2(2) the potential accident saving due to small road improvements alone is of the order of one-ninth. This may be taken as the target accident reduction for small road improvements. The limitation of resources means that this target will have to be achieved by stages.

4. Having determined the local target it is necessary to estimate the investment required over the complete life of the programme in order to achieve that target. While the discounted economic rate of return should always be used when ranking schemes in order of priority, the first year of return may be used for sake of simplicity when estimating the level of investment required to achieve the local target. An example will best show how this can be done.

#### **Estimating long term investment required to achieve target**

5. Assume that there are 5000 injury accidents per year in the county, and that the cost of an injury accident is £2,000 per year (see note below). The annual cost of accidents in the county will then be £10M. If for the sake of simplicity it is assumed that the potential accident reduction over the complete life of programme is 10%, the annual saving in accident costs will be £1M. Assuming an average first year rate of return of 50% a total investment of £2M will be required, spread over the complete life of the programme to achieve this target.

6. It follows that if say £50,000 per year is available for small road improvements the programme will take 40 years to complete, or eight 5-year phases. Assuming a steady investment of £50,000 pr year at constant prices the accident reduction will be ¼% in the first year and will increase by ¼% per year on average. The discounted benefits will ultimately be of the order of £8M for an expenditure of £2M.

## **ROAD USER PUBLICITY AND TRAINING PROGRAMMES**

### **Need for publicity and training**

7. Some 90% of all road accidents exhibit a predominance of human factors. While many of these human factors may be greatly influenced by engineering remedies of the kind discussed earlier, there are certain classes of road user (eg young and elderly pedestrians, riders of two-wheeled vehicles and young drivers) who will remain especially vulnerable no matter how well engineered a site may be. It would be socially unacceptable not to take steps to protect these particular people on the grounds that this work may not produce the same accident savings and consequently the same economic rates of return as engineering based remedies, or because it is difficult to evaluate the results of publicity and training remedies at the present time.

### **Level of investment**

8. It will therefore be necessary to determine a proper balance between investment on small road improvement programmes and road user publicity and training programmes. Since few if any well established parameters are available such a balance will need to be arrived at on the basis of local knowledge and experience of past practice. It is of the utmost importance, however, that steps should be taken to evaluate publicity and training programmes in order to develop parameters which will assist in determining a proper balance of investment. Furthermore, it is only through proper programmes of evaluation that the information necessary for the proper design of publicity and training programmes can be gained.

### **Evaluation methods**

9. It is notoriously difficult to evaluate such broad areas of work as poster advertising or the training of school children, so that it is necessary to select comparatively small areas of work and to prepare a programme for evaluating these over say 5 years. Each of these small areas of work will need to be designed in such a way that it is capable of being evaluated. In fact the evaluation process needs to be designed into the scheme from the outset.

10. Evaluation of selected publicity and training schemes can be carried out in two stages. In the first stage it is necessary to discover whether or not road user behaviour has been changed in the manner intended, the established principles of survey and market research being utilised. In the second stage, which will normally be about 3 years later, it is necessary to discover whether or not any change in road user behaviour has led to a reduction in the appropriate type of accidents. At this stage some statistical interpretation of the results will be required.

### **Examples**

11. At a high risk city centre site it is proposed to mount a publicity campaign to encourage pedestrians to use the crossing instead of crossing within 50 yards of it. Before the start of the campaign a pedestrian count needs to be taken to establish the ratio of pedestrians crossing on the crossing to those crossing within 50 yards of it. After the campaign the count needs to be repeated at intervals to establish whether or not this ratio has increased and to establish the decay rate. After a suitable period the accident needs to be analysed in order to determine whether any change in number, rate or type has taken place. Evaluation of this kind will not only provide a measure of the effectiveness of the campaign; it will also provide valuable information for improving the design of future campaigns.

12. It is desired to evaluate the effectiveness of training school children. It would be an impossible task to carry this out on a county wide basis, but a possible approach would be to identify a group of schools in some compact area having a particularly high number of child accidents. It would then be necessary to obtain the full accident reports, survey the accident sites and obtain as much information about the children involved as

is possible. In this way the dominant accident factors could be identified, and a tailor-made training programme devised to help the children to combat the particular risks they have to face. The before and after data necessary to evaluate any change in behaviour can be obtained by personal survey or the use of video equipment. Again, after a suitable period of statistical analysis of the accidents will need to be carried out in order to determine whether or not there has been a reduction or change in type. Because children move on from class to class and school to school, the analytical, training and evaluation stages of the project will need to be carefully phased.

13. Further work on the development of methods of evaluating local road safety publicity and training schemes is being carried out by the Department in collaboration with RoSPA who are concurrently preparing a course for local authority road safety staff on the Design and Evaluation of Local Publicity and Training Schemes. This will eventually replace the Department's course for road safety officers which has been held in abeyance.

## **NOTE**

In paragraph 5 the costs of £2,000 per accident was selected for sake of arithmetic simplicity. The cost of various types of accidents at 30 June 1974 values is shown in the table. These are revised annually. It is advisable to use the value obtained by taking the total national cost of all accidents divided by the national annual total of personal injury accidents given on the bottom line of the table. In this way account will be taken of the attendant damage only accidents. Separate values are given for various classes of road and the cost of accidents on these can be computed separately and summed to obtain the total cost. If the necessary data are not available it may be assumed that 75% of all accidents occur on roads with a speed limit of 40 mph or less and that 25% occur on roads with speed limit in excess of 40 mph.

**TABLE : THE COST OF ACCIDENTS AS AT 30 JUNE 1974 (£)**

	Roads subject to 40 mph limit or less	Roads subject to limits in excess of 40 mph	Motorways	All roads
Fatal accident	28,000	33,000	38,000	30,000
Serious accident	2,000	2,800	3,000	2,200
Slight accident	350	600	650	400
Damage-only accident	160	200	230	170
Average injury accident	1,300	3,000	3,600	1,700
Total cost of all accidents divided by the number of injury accidents	2,300	3,900	4,600	2,700
Number of damage-only accidents per injury accident	6.4	4.6	4.5	6.0

NOTE: Costs may be expected to increase at a rate of 3% pa in real terms in the case of injury accidents, and to remain constant in real terms in the case of damage-only accidents.