



THE CHILD ON THE ROAD



THE CHILD ON THE ROAD

A report based on a study of the experience of 1951

PRESENTED TO THE
National Federation of Women's Institutes

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" THE CHILD ON THE ROAD "

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A Foreword

Mr. Gordon Stewart died suddenly from a heart attack on the 21st January, 1952 while in the act of doing a service, characteristic of him, to give pleasure to children near his own home in Surrey. His love of children was impassioned and chivalrous; his concern for their joy and well-being intense, importunate and insistent. Recalling the saying that the race marches forward on the feet of little children he would add with a flash of anger of heart that the race seemed strangely blind and indifferent to the human fact. You must give yourself; you must bleed for me, wrote Emerson, as touching the deep and compelling concern for another. Mr. Gordon Stewart's thoughts bled for pain and shame as he contemplated the tragic monthly mounting aggregates of child-deaths and child-accidents on the roads of Britain. His compassions gave him no peace; they stung him into ameliorative action. Over a period of twenty years or more he was in close touch with Mr. Sydney Walton and it was he who advised the forming of the Study Group whose Report this is. Mr. Stewart welcomed the idea, and as his pity was no passive emotion added his own zest to the deliberations until death untimely intervened. A pathos, over and above the pathos of the thousand sorrows which becloud the highways and by-ways of England's green and pleasant land, is added to these pages by reason of Mr. Stewart's decease. If he were alive at this hour he would be pleading that what he thought of in terms of a Crusade for the Safety of Children should not cease but, like warning beacons on the hills of old, excite attention and speed the people to posts of action. And he would be thanking his friend Lord Nuffield for the generous support originally given to the fund which has made possible the studious preparation and wide publishing of the Report.

An Expression of Thanks

To me, as the surviving Trustee come the duty, the privilege and the pleasure of adding an appreciation — as I now do — of Professor J. H. Jones's acceptance of the invitation to be the Chairman of the Study Group with power and authority to choose associates, each of whom has guided and enhanced the research and the interpretations. The Group has addressed itself throughout with earnestness and wholeness and gravity of purpose to the exposition of the facts and factors and figures deriving from the problems and tragedies the tale of the road presents. To the Economic Research Council whose Chairman is Mr. Ian Mactaggart I would voice my gratitude for placing offices and facilities at the disposal of the Group and releasing the Council's secretary to devote the time the Study Group needed for administrative and secretarial duties. I should add that the secretary did more than fulfil such duties; he brought to the service of the Group a trained mind, a wisdom of feeling, a gracious quality of insight and understanding.

SYDNEY WALTON

Introduction

by PROFESSOR J. HARRY JONES

My colleagues have agreed that, as informal Chairman of the Study Group, I should write a personal introduction to this Report. I am grateful for their trust, and shall begin by making a two-fold confession.

In 1944 I was asked by the Parliamentary Secretary to the Ministry of Transport if I would make an estimate of the cost of road accidents during the last four years of peace. Part of the necessary sample investigation that followed involved the examination of over 6,000 accidents.

The result was horrifying. The estimated cost proved to be not less than £60 million (not less than £120 million in terms of post-war money) in each of the four years under examination. Ninety per cent. of that total represented human injury. But that was not all. Reading through report after report it became evident that much human suffering and misery was beyond money measure, and that the lives of many who had escaped death had been considerably shortened.

Until then I had taken but little notice of accident statistics, although I had myself suffered an injury in an accident when sitting beside the driver. It was all in the day's march: I loved speed when driving, enjoyed overtaking others and gave little thought to the danger of accidents. That is my first confession: my conversion came through reading the police reports.

* * *

Long before the war many professional economists devoted much study and research to the problem of unemployment. We felt that if public authorities concentrated capital expenditure upon periods of depression, industry would be kept on a more even keel and unemployment would be reduced. We

believed that the outstanding type of capital expenditure suitable for this purpose was expenditure upon roads. Road development and maintenance should be subordinated to the need for providing employment to the unemployed of other industries; in time of pressure, following a devastating war, it could most easily be sacrificed. Among the "priorities" it found no place, and was for ever on the waiting list. My second confession is that, along with many of my professional colleagues, I was wrong. We had neglected the study of road economics and ignored the problem of road accidents, which was even more serious than that of unemployment.

Road maintenance and development must be considered on its own merits, irrespective of the state of employment. The need for efficiency and safety cries aloud for a new orientation in thought and in action. Efficiency and safety are indeed so closely interwoven that they cannot easily be separated: they are Siamese twins. An efficient road system is a safe system: an unsafe system is an inefficient system.

* * *

But old beliefs die hard and have largely influenced Government policy even since the war. Because human error has been reported as the primary cause of over ninety per cent. of accidents it is assumed that road defects contribute but little to the total. But it is a false assumption, based upon a misinterpretation. In a sense it is inevitable that in nine out of ten cases human error should be the immediate or exciting cause, but the true cause is to be found in a combination of circumstances that create the situation in which the critical error is made and of which it forms part. A driver may hit a pedestrian on

a dark road on a dark night. A human error is committed, but the accident would probably not have occurred if the road had been provided with lights.*

The need for research has long been accepted. Having almost completed my seventh (and last) year as a member of the Road Research Board, and acted for periods as Chairman of two of its Committees, I can claim to speak with some knowledge; and I now feel free to pay tribute to the work that has been done in the field of research and the fullness and effectiveness of the co-operation between the experts in the Road Research Laboratory, the Ministry of Transport and the Police Departments. Research includes sample investigations in the laboratory or on the roads, analyses of police records of accidents and experiments of various kinds with roads, vehicles and their component parts and accessories, such as lamps. Often these are combined.

• • •

The first essential of post-war research was to secure that the police records were adequate for the purpose. Research is a long-term undertaking; it involves careful planning, much preliminary work and patient investigation of innumerable details. The workers in this field are now reaping their reward. Our present information about road accidents is beyond comparison with that which was known five years ago. The recently published reports for 1951 of the Road Research Board and the Ministry of Transport, and the Statistical Analysis of Road Accidents in 1951 (in the Metropolitan Police District) published by the Commissioner of Police of the Metropolis, bear witness to the devotion of experts who are driven by their hearts and inspired by the possibilities already opening out as the result of their work. Not the least important in the wider field are the police officers in all parts of the country, whose information on the new record sheets is making possible a deeper and wider understanding of the most

serious social evil from which we suffer in time of peace. Nor should we forget the less direct but highly important contribution to our knowledge made by the A.A. and R.A.C. scouts.

During the war many wondered what would happen when peace was restored; when garage doors were opened and old cars again appeared on the roads, now suffering serious deterioration; when drivers who had been off the road returned, suffering from lack of practice; when new drivers, trained upon half empty roads, suddenly found themselves on crowded roads; when army lorry drivers had to thread their way through lines of commercial vehicles and private cars.

Our worst fears were not realised. Petrol rationing, combined with the need to export as much as possible of the growing supply of new cars, checked the growth of road traffic, while the road safety campaigns must have fully justified the efforts of those who took part in the work.

* * *

But what of the future? The industrial economy will be based, to an increasing degree, upon road transport, while personal travel by road will inevitably grow, even if it be at the expense of travel by rail. Between 1929 and 1951, in spite of a long trade depression and the retarding effect of the war, the total number of motor vehicles (excluding motor cycles) in use in the United Kingdom increased from slightly less than one-and-a-half millions to more than three-and-a-half millions. Prolonged research in the tyre industry, in braking systems, etc., has made possible the growth in size, speed and weight of motor vehicles of all kinds. At present the limiting factor is the road.

Economic progress if not, indeed, survival depends upon the provision and maintenance of an adequate road system. In the United States of America it is estimated that road traffic will be doubled in the next two decades. We in Great Britain are now very near the

* Since the above was written a friend of my youth has been killed, near Swansea, being knocked down by a car in a dark area between two lights. No blame was attached to the driver.

limit of growth in population, but not in road transport. The latter has already reached the order of ten per cent. of total economic activity and the proportion is rapidly growing. We may not witness the spectacular increase in traffic expected in America, but even the most conservative estimate would be an increase of not less than fifty per cent. How can we expect efficiency when traffic delays mean a heavy cost of idleness both of equipment and of people on our present roads? How can we hope to avoid a catastrophic increase in accidents?

No-one would suggest that the risk of accidents can be eliminated from our lives. We have deliberately chosen a line of progress that would appear to increase rather than reduce risks. Fatal accidents and others involving human injury are accepted — and they may happen to any of us — as a cost worth paying for those benefits to mankind that modern civilisation has conferred. But a very large proportion of road accidents are of the kind that may be avoided if the right action is taken. There is no doubt, for example, that the present road system is an increasingly important factor contributing to the number of accidents.

* * *

To what is set forth in this Report I would add two further suggestions. We need to look forward many years and prepare for the situation by which the community will then be confronted and a density of traffic far exceeding that of today. Even today, however, the supply of police officers available for traffic duty is seriously inadequate. The second element in the situation is that the demand for drivers of commercial vehicles is steadily increasing. The third is that a stream of youths is passing into and out of military service. If a special scheme of apprenticeship were adopted by the Police the apprentices might be trained in traffic duty of a suitable character and, during the period of training, taught to drive vehicles of all types. For such apprentices a period of training extending over two years might be recognised as equivalent

to and carrying exemption from one year of military service. In such a case the second year of service would probably be spent in the transport division. At the end of that period the trainee would be free, of course, to choose his own career. Probably the vast majority would either rejoin the police force or become drivers of commercial vehicles or public service vehicles. Such a scheme would probably prove highly attractive to youths, increase the number of busy crossings controlled by police officers and add to the supply of highly skilled drivers whose services would be eagerly sought. The desirability and practicability of something along these lines seems to me worth considering.

The second suggestion is prompted by the effect upon myself of reading a number of police records of accidents before the war. An applicant for a driver's licence is submitted to a driving test and asked questions about the Highway Code. Might it not be desirable to provide the applicant in advance with the full record of a selected group of accidents which he (or she) would be required to read in addition to the Highway Code? An expert driver is not necessarily a safe driver. The young people of today will form the great majority of drivers in due course; anything that would assist in building up a generation of safe as well as expert drivers would do much to reduce accidents. It is too late to require further examination from existing drivers, but if a scheme along such lines were adopted it would not be too late to present a similar record to each applicant for a renewal of his or her licence.

* * *

The most significant and disturbing revelation in this report is the high risk of accidents to child cyclists and it may well be that some readers will rush to the conclusion that the obvious remedy is to pass an Act of Parliament forbidding all children below sixteen years of age to ride bicycles. But such a cure would be worse than the evil itself. It should not be forgotten that, apart from several other considerations, the child cyclists of today will

be among the drivers and motor cyclists of the future. The development of a road sense has become part of the education of the individual in the world of today. To prevent children from riding bicycles and otherwise acquiring a road sense is to invite an increase in road accidents in the future. Because we believe that a generation of child cyclists will later be a generation of safer users of the road, as vehicle drivers, motor cyclists and pedestrians, many of us also believe that children should, from their earliest years, be encouraged rather than forbidden to use tricycles and bicycles. So much may be said without examining the other aspects of the problem.

The most precious gift of every generation is its children, a gift that is shrinking with the passing of the years. Our concern is with accidents to children, although we fully recognise the difficulty of separating the problem from the wider problem of road accidents. With the growing density of traffic, upon roads that are already inadequate, through areas teeming with children who are attracted by the glamour of crowds, shops, cinemas and traffic, and in any case lack playgrounds, the threat of further increase in accidents far outweighs the prospect held out by measures already taken.

* * *

It is surely a profound error to blame large classes of road-users. To criticise, in general terms, pedestrians or private motorists or lorry and bus drivers or motor cyclists or cyclists is to place each class on the defensive, to excite irritation and engender antagonisms, and to prevent that combined attack upon the problem without which the evil itself cannot be eradicated. We are all road users and individually responsible for the manner in which we conduct ourselves while using the road, as well as collectively responsible for the kind of roads that we maintain. The duty of the

parents of children using the roads requires no emphasis; they cannot divest themselves of their own responsibility by relying wholly upon school instruction, which is now so valuable.

Those who claim to be completely indifferent to public opinion are usually less truthful than boastful. In our conduct as users of roads most of us are influenced by the attitude of those around us. Given the present condition of affairs public opinion can be made a powerful ally of legal requirements: it can also effect changes in that condition. But it is not easy to build up and maintain that pressure of public opinion which is necessary not only to raise the standard of road behaviour but also to stimulate action by public authorities, both central and local.

When a part of the country suffers a flood disaster or a group of youths are killed in a bus accident the public is deeply moved and the newspapers of the country are seen at their best. But road accidents are widely spread and of daily occurrence throughout the year and their impact upon public opinion is scarcely perceptible. If all that occur in a month were always concentrated, first in one small area and then in another, the magnitude of the disaster would become so apparent to everybody that the public would brook no delay in introducing the necessary reforms. Yet, every month, the loss of life is far greater than that caused by the floods of the present month.

* * *

We believe that the women of Britain can exert a strong and enduring influence upon public opinion and we rejoice in the cooperation that the Women's Institutes have already extended to us in our present effort. In submitting this report to them we fulfil, in letter and in spirit, the wishes of Gordon Stewart, Founder of the Children's Safety Crusade Trust.

February, 1953.

J. HARRY JONES.

I Aim and Scope of the Report

1. If there is one point, in respect of accidents on the roads, which burdens the conscience of every one of us, it is the appalling toll imposed upon the lives and well-being of children.

What can we do about it?

2. Many important things have been done, and are being persistently and successfully done, as is shown elsewhere in this report. But a total of 42,676 child casualties on the roads of Britain in 1951 — at least one child killed or maimed in every fifteen minutes — declares emphatically that we have still a very long way to go.

3. There is no way of bringing comfort out of the figures. Actual totals of road accidents to children were :

1949	38,767	1951	42,676
1950	39,780	1952	40,927

The trend cannot be determined from these total figures alone, for there are significant variations in the child populations of the years. Making allowance for these variations, and considering the total of child casualties as a percentage of living children in each of the years, the risk rates in 1949 and 1950 were almost identical ; there was a distinct improvement in 1951 among young school children, but there is no evidence of further improvement in 1952.

4. What more can we do about it?

That is the question to which this report is addressed. And the broad answer is that at least we can all do more if we can know more precisely what the major perils are. How much more can we discover, then, than has hitherto been known about road accidents to children ?

5. Our task therefore was to bring to light facts concerning road accidents that can teach practical lessons to all who are concerned with the welfare of children. In this context " all concerned " means, not only the children themselves, but also mothers, fathers, teachers,

safety officers, members of safety committees, and indeed all adults since all of us have responsibilities towards children.

6. The foundation of our study has been a detailed analysis of official records of road accidents to children throughout the year 1951. That piece of fundamental research was made possible by the co-operation of the Road Research Laboratory, and we are grateful to the Director, Dr. W. H. Glanville, and to his colleagues for their ready and expert help and wise counsel.

7. As to the scheme of investigation that might be expected to realise our practical purposes, certain factors obviously needed to be accepted. For instance, risks clearly vary with age; as between boys and girls; with the seasons of the year, the days of the week and the hours of the day; and as between school-term and school-holiday periods.

8. The last of these points of variation raised a special problem. School-term and school-holiday periods are not uniform for all children. Such periods as the first fortnight in September are school holidays for some children, school term for others. Since study of the available records of these mixed periods could not yield information capable of practical interpretation, it was decided to exclude them from the present investigation. That ruled out about 12,500 of the 42,676 accidents to children in 1951, and left (in round figures) 30,000 accidents which occurred either definitely in school-term or definitely in holiday periods, and could therefore teach practical lessons.

9. Within those wide limits, all accidents, and not fatal accidents only, have been taken into the scope of the analysis. It is a matter of chance whether a child involved in a road accident is killed or injured. Moreover, police reports, which are the basis of all official records, are necessarily concerned with what happens at once. They do not and cannot tell us anything about death which follows an

accident after an interval of days or months or even years.

10. The actual information concerning these 30,000 child casualties made available to us by the Road Research Laboratory covered these points :

- (a) Sex and age of the child;
- (b) Date and hour of the accident;
- (c) Degree and seriousness of the injury;
- (d) Vehicle or vehicles involved;
- (e) Whether the child was on foot, cycling, or boarding or sitting in a public or private passenger vehicle;
- (f) What the child was believed to have been doing when the accident occurred.

11. Selection of age groups set another preliminary problem. Children of the same

age and sex differ widely in temperament, gifts and habits. We should not be talking in practical terms, then, if we referred only to such entities as "a four-years-old child," or "a ten-years-old boy" or "girl." It was therefore decided to group the children in categories that every parent and teacher would easily recognise. That meant a series of age-span groupings which would overlap at the edges to some extent. This problem we gladly referred to the Women's Institutes: and we cannot pass on without recording our thanks to the institutes, and especially to Dame Frances Farrer, General Secretary of the National Federation of Women's Institutes, and to Mrs. Routh, a member of the Institutes' Public Questions Committee, for most practical help in our enterprise.

II Women's Institutes Inquiry

12. To facilitate the task of the Women's Institutes, in settling the appropriate age-behaviour groups of children, the National Federation readily agreed to ask some of their members to study and answer a series of questions. In May, 1952, members, committees and information panels of the Institutes in over twenty counties in England and Wales considered the questions, and group discussions took place in more than thirty institutes. When these discussions were taking place, the information which later emerged from the analysis of the 1951 statistics was of course not available. So far as that analysis supports the opinions of the Women's Institutes, as it often does, the opinions are examples of wisdom before the event.

13. One interesting feature of the Institute reports was that, with perhaps two exceptions in particularly quiet rural areas, no significant difference in attitude existed between institutes situated in the country and those in more highly-populated areas with denser traffic.

14. The most important conclusion—and perhaps a startling one to come from a body consisting largely of mothers—is that the child

is his or her own worst enemy on the roads. Practically all the reports made the same point in one form or another. It was put most emphatically by the full meeting of an Institute in a village situated on a main traffic artery:

"Car and lorry drivers are normally blamed for accidents, but generally speaking they are the victims of the children's carelessness."

Another report, almost the width of the country away, speaks of girls between 12 and 14 as the only group of children who can be considered so thoroughly responsible that the blame for an accident to one of them might reasonably be supposed, *prima facie*, to rest on the driver of the vehicle.

15. All else flows logically from this view: a view of the child as lacking in knowledge and experience, but blessed with curiosity, initiative, impulsiveness, courage and conceit (with a ration of original sin). It is the only view one could expect from mothers in a country such as ours.

16. It follows that the respondents placed a heavy responsibility upon parents—respon-

sibility for safeguarding and close supervision of children during the early years before even the simplest training can start effectively; and, subsequently, a continuing responsibility to train the child according to his capacity to learn and having regard to the dangers he is bound to meet. This responsibility was specifically stated in many instances to include restriction of controllable risks, e.g. refusing to provide tricycles, scooters, and, later, cycles, until the child is mature enough and expert enough not further to add to the risks he already runs.

17. It was recognised that in many respects parents were not properly equipped for their task. In a few cases that was said plainly. More often there was a plea that others should teach the child, sometimes with emphasis on the effectiveness of the police in giving road training. The need for educating the public was urged:

"In the case of under-five's, of *parents*. A continuous publicity campaign by every means to that end. We did it in the case of immunisation against diphtheria, and gained the desired results."

"In the case of the 5-14 age group, a fuller co-operation by everyone—parents, teachers, club-leaders, and police—*especially* the Educational authorities helped by the Police."

In another instance:

"Do police records give the ages and sex of children who meet with accidents on the road? And would it be possible to analyse such records? . . . only such an analysis would give a true result."

18. The following are the principal recommendations of the Institutes. They are presented in a generalised form, are consistent with the specific statements made in at least a clear majority of the reports, but they do not preserve the numerous qualifications and

particular emphasis given by individual reports.

- A. All parents should study and know the relevant sections of the Highway Code so that they can teach their children correctly.
- B. Up to at least the age of five, children should be adequately supervised. Supervision of younger by older children is not adequate.
- C. Young children should not be allowed to ride tricycles and scooters on pavements without supervision, and should be prohibited from riding on the roadway.
- D. No child should be allowed to ride a bicycle in the road unless he has passed a test as to his own fitness and the fitness of his machine.
- E. More playing fields, recreation grounds and play streets should be provided. There should be suitable attractions for the different age and sex groups, and the greatest possible segregation of younger and older children.
- F. Under present conditions, motorists should be compelled, in their own interests, to reduce speed in roads frequented by children, and the 30 m.p.h. limit should be much more widely imposed, whether the roads in question have lamp standards at prescribed distances or not.*

19. The following are the Institutes' recommendations concerning the grouping of children:

- A. The period of impulsive action, complete lack of road knowledge, and inability to learn adequately: generally felt to end around the fifth year.
- B. The play period, when supervision is less feasible, and ball games, etc., distract from proper caution. Some differences in definition but, broadly

* The implication here that only roads having lamp standards at the prescribed intervals are subject to the speed limit is not actually true. The automatic application of the speed limit to a lit road can be cancelled by a "de-restricting Order," and conversely an unlit road can by Order be restricted. It is the duty of the highway authority, by the use of such Orders, to rationalise the system of speed limits in its area, without regard to the existence or otherwise of street lamps.

speaking, this period is said to last until 7 or 8 for boys and sometimes longer for girls.

- C. The gang period, when boys and girls play separately, and boys especially are inclined to indulge in daring and fool-hardy actions. This period is the more dangerous because it is held that it coincides with the first bicycle, on which competence as a performer comes more quickly than competence as a road user. Ages roughly from 7 or 8 to around 12.
- D. The showing-off period (as distinct from

daring) which is generally regarded as tending to offset that sense of responsibility which can emerge around the age of 10, but which tends to disappear completely by the age of 14 when showing off before the opposite sex is a powerful influence.

20. These four broad age-behaviour groups have been used as far as possible in the analysis of road accidents to children during 1951. In precise terms the age-behaviour groups studied in this report, Girls and Boys separately, are: 0-6; 5-10; 9-13; 12-16.

III Study of Risk Rates

21. Technical points concerning the statistical study on which this report is based are set forth in an Appendix to this report. All that needs to be noted here is that this report talks about "Risk Rates," and not about numbers of casualties as such. Each Risk Rate measures the comparative risk to the individual child, always on the same basis. All the risk rates are therefore strictly comparable with one another.

22. When you read, for instance, concerning pedestrians that the Risk Rate of a 12-years-old boy on a June schoolday is 20, and that of a 4-years-old on a similar day is 150, it means precisely what the figures say: that the danger to a 4-years-old boy on such a day is almost exactly seven-and-a-half times as great as that to which a 12-years-old school-boy is exposed.

23. In reading what follows, it can be taken that a Risk Rate of 20 (the average risk of a child as passenger on the road) is probably as low as it is possible to get it. By comparison a Risk Rate of 80 is serious; a Risk Rate of 140 is tragic; anything above 140 represents so terrible a danger as to be a catastrophe which a civilised society must deal with imperatively and urgently, even if the area over which such a risk rate operates be restricted.

24. It will be seen (pages 30-33) that Risk Rates exceeding 140 appear with terrible fre-

quency. The highest point reached by risk rates for pedestrians is 240—for 7-8 years-old boys on Saturdays in October and November: that is 100 points in the area that we have called catastrophic. The highest point ever reached is actually more than twice that frightful figure—a risk rate of 490 for boy cyclists of 15-16 years old, on Sundays in June: 350 points in the area that we have called catastrophic. Our language has no word to represent a disaster of such magnitude. Yet, as will be seen in due course, this, and all other risk rates for cyclists underestimate the actual risks, which cannot in fact be less than fifty per cent. greater than they here appear. If a risk rate at all over 140 is catastrophic, what shall be said of a risk rate in the region of 750!

25. Anyway it is clear that this first report had better concern itself mainly with peak risks, since they alone imply a formidable programme of urgent remedial action.

26. But action must be well-directed action if it is to achieve its purposes. This study therefore goes beyond the mere indicating of risk rates at differing ages or in differing age-groups; divided as between Girls and Boys; and divided again as between pedestrians, passengers and cyclists. It differentiates between school days and non-school days of the week, and further between Saturdays and

Sundays; between term times and school-holiday periods; between the seasons of the year with their widely-varying hours of daylight; and between the hours of the day.

27. Finally we have probed beyond all these factors in order to discover what may be called the characteristic accidents, so as to be able to say, not merely that such and such are peak risk-points, but what are the kinds of behaviour that build up the peak risks. We have sought to find out, as accurately as possible where, when, and why children of particular ages run the greatest risk of injury

on the roads; to sort and group this information so that it will be useful to parents, teachers, and every citizen who is old enough to take action; and finally to translate the results into suggestions as to how it might be used most effectively. It is thus hoped to remove some of the handicaps under which parents, teachers and safety officers and committees have laboured in their efforts to train children to become safer on the roads; and to show what needs to be proclaimed with greatest persistence, and done with greatest urgency.

IV Results of the Study Surveyed

28. Statistical study on the lines indicated emphasises certain facts that were already well known. But it has important new things to say also.

29. Taking the year 1951 as a whole, the ages 4-5, 5-6, 6-7, 7-8, and 8-9 were particularly dangerous for boys. The same age groups were particularly dangerous for girls, but only about half as dangerous as for boys. These things were already well known.

30. What has not hitherto been realised is that the risks run by boys of 11, 12, 13, 14 and 15 are at least as great as those of their younger brothers. On the evidence of the year 1951, the risk run by 15-years-old boys on the roads at certain times of the year is two or three times as great as that of the small boy just starting school. This is a new and startling discovery. What lies behind it? Turn to the graphs on pages 34 to 41 and it will be found that the answer announces itself dramatically : *the bicycle*.

31. Let us, however, examine the matter systematically, and consider all the ways in which children met injury on the roads in 1951. It is possible to dismiss the risks run by children as passengers in cars and other vehicles, and in getting on and off them. That risk varies with the time of the year, being higher in summer than in winter, but the risk rate seldom exceeds 50 and the average is

around 20. Removal of the passenger risk leaves the total risks run by children practically unaltered, except for children under 3 years old.

32. We are left with the child as a pedestrian and the child as a cyclist. To put the matter briefly, the child pedestrian's danger increases until he or she is 6-7 years old, and then decreases. At first the improvement is slow. Then, from about the age of 9 the improvement is dramatic, so that by 12 the risk has become negligible and continues to be so. On the other hand, the child's cycling risk is non-existent or negligible until he or she (particularly he) is 9 or 10. Then it rises alarmingly, and goes on rising.

33. We shall return to the cycle risk in due course, first when we turn our attention to the age groups in which it is most serious; second in the section of this report where an attempt is made to assess the problem and to indicate methods of attack on it. (See page 17).

34. If, as is convenient, we divide child pedestrians into two overlapping groups — those under 6 and those 5-10—it may be noted that the risk to the under-sixes is significantly less in winter than in summer, and that a much smaller difference exists for the 5-10 group. It has already been observed that there is no need to consider the child over 9 as a walker, since in a very real sense he is

looking after himself increasingly well. There is another grain of comfort: the risk to pedestrian children on winter Sundays is

negligible, and it is nearly so in the other seasons, no matter what the age.

THE PRE-SCHOOL CHILD 0-6 YEARS OLD

35. The pre-school child is always in danger when playing out of doors without supervision. His risk rates follow almost precisely the line that registers seasonal variations in hours of daylight, excepting on Sundays (as we have noted above) when presumably children are more under the care of their parents. This underlines the plea of the Women's Institutes for the better supervision and training of children; and, since children of this age cannot be expected always to remember their training, and because supervision can never be perfect, the need for special measures in respect of vehicles operating in areas where young children commonly play in or near roads. Reference is made elsewhere in this report to the special responsibilities of drivers of tradesmen's vehicles. (See page 18).

36. Study of the tables setting forth the risk rates (pages 30 — 33), and particularly the figures in red (serious risk rates) and in bold red (catastrophic risk rates) will indicate points that clamour for care. We draw special attention to the dangers on Saturdays and during holidays.

37. When, during the day, is the risk greatest for young child pedestrians? The worst times are mid-morning and mid-afternoon. On Saturdays the mornings are markedly dangerous.

38. What brings about the risks? The answer is terribly simple. At all times of the year, stepping, walking, or running off the pavement is a greater source of danger to young children than even crossing the road—over five times heavier in the toll that it exacts than playing in the road. Also the degree of injury is more serious than that which follows other actions. *Kerb drill, pedestrian crossings etc. are therefore not enough.* They miss the danger which accounted for just on half the injuries suffered by child pedestrians in 1951.

39. The next greatest contributory factor to the danger to young child pedestrians is crossing the road. Nearly nine out of ten of those children who became road casualties in 1951 were hurt when they were either stepping off the kerb (not crossing) or crossing the road.

40. Here then is a point for action. Parents, and all other adults who have to do with the training of these little children should instruct them:

Don't step or run off the pavement ever, except to cross the road, and then remember your Kerb Drill.

By the same token, extreme care and slow speed are called for from all other road users when children are near the roadway.

THE YOUNG SCHOOL-CHILD 5-10 YEARS OLD

41. Attention is again directed to the risk-rate tables (pages 30 — 33) and to the figures printed in red type for "tragic" and bold red type for "catastrophic" risks. (These risk-rate tables are also re-presented as graphs in pages 34-41). We stress the terrible degree of danger to children in the first two years of their schooldays, and that there is still very serious danger even at the top of this age-group. The better experience of girls than of boys is evident here as at most other points in this study.

42. The dangerous hours of day for the young schoolchild vary as we should expect. On Mondays to Fridays, going to school, the dinner break, and coming home from school are dangerous, and the danger extends into the early evening in summer. On Saturdays in term-time and during holidays the risk during any one hour is lower, but the danger persists throughout the normal outdoor playing hours.

43. What brings about the risk? The

same simple dangerous actions as put the pre-school child in peril. Nearly half the children were injured stepping, walking or running off the pavement. Almost as many were injured crossing the road. Injuries from all other causes were negligible. There is therefore continuing need for instilling the rule:

Don't step or run off the pavement ever, except to cross the road, and then remember your Kerb Drill.

At this stage also the pedestrians' rule of the road ought to be in the mind of every child:

Walk to the left on the footpath: walk to the right on the road.

Again other road users need to be reminded of the need for extreme care and low speed when there are children anywhere near the roadway.

THE MID SCHOOL-AGE CHILD AGES 9-13

44. Boys and girls between 9 and 13 are good pedestrians. The risks they run are seldom as much as half as great as those of their younger brothers and sisters. The actions giving rise to the risks are, however, the same.

44. But now the shadow of the cycling risk is beginning to fall. Please turn again to the risk-rate tables (pages 30 — 33), and it will be seen that the cycling risk rate for the 11

and 12 years-old boys is often well above the catastrophic level of 140. All that official statistics can tell us is the risk rate to the cyclist on the assumption that all boys have bicycles. As many boys have not, the risk for boy cyclists may be twice or three times what is suggested by the number of accidents recorded. But since the next age group shows the problem at its fiercest, further comment is left to the following paragraphs.

THE YOUNG ADOLESCENTS AGES 12-16

45. These children are probably the best pedestrians in the country. The risks they run are always small, sometimes negligible.

46. But they pay a terrible toll as cyclists. Again we draw attention to the risk-rate charts on pages 30 — 33, which show almost an unbroken series of catastrophic risk-rates for boy cyclists of this age-group. Even the girls, whose record throughout childhood is so much better than that of their brothers that they show risk-rates in the catastrophic class only thrice in their young lives, produce two of those three peaks as young adolescent cyclists.

47. It will be recalled that the highest child-pedestrian risk-rate we have encountered is 240. That peak for pedestrians is dwarfed by the risk-rates of 12-16 year-old boy cyclists as follows:

- (a) On Sundays in June, by boys aged 13-14 (rate 280), 14-15 (rate 400), and 15-16 (rate 490);

- (b) On Saturdays in June, by boys aged 12-13 (rate 250) and 15-16 (rate 380);
- (c) During the August holidays, by boys aged 15-16 (rate 300).

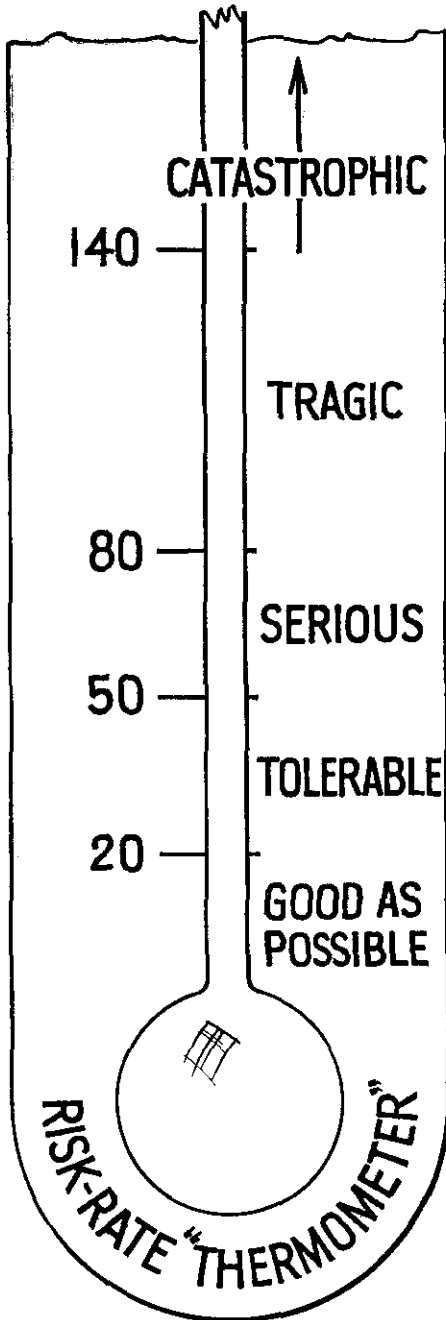
48. These figures are dreadful as they stand. Yet they are based upon the assumption that, just as every child is a pedestrian, so also at this stage every boy is a cyclist. But obviously not every boy is a cyclist. Precisely what proportion of boys ride bicycles is not known, but it is certainly less than two-thirds.*

It is evident therefore that the risk rates for cyclists as they emerge from our statistical study need to be increased by at least half. The risk rate for boy cyclists of 15-16 in June must have exceeded 750—about three times the highest risk run by what has hitherto been thought to be the most vulnerable of all road users, the little boy pedestrian of 5-6 going to school on his own for the first time.

49. The only time when the risk to boy

* The highest known ownership of bicycles is two among three young men between the ages of 16 and 24 (Hulton Survey for 1951) — ages beyond the scope of the present study.

cyclists in this age group falls below the level of "serious" (risk-rate 80) is during February and the Christmas holidays. So long as it is light enough and warm enough to go cycling, the risk is very great. Attention is drawn to the fact, finally established in the tables in the statistical appendix, that the great mass of



child-cyclist accidents are during hours of daylight. Evidently not much cycling is done by children after dark.

50. The risks for girl cyclists are hard to assess, because, while it is known that fewer girls than boys possess bicycles, no figures are available. Some of the actual casualty figures are high, but in general they are much lower than for boys. Whether the individual girl cyclist is that much safer on the road is not capable of proof.

51. When are the risky times? Throughout the hours of daylight, except possibly in mid-winter, whenever the children are not safe in school.

52. What do child cyclists do to put themselves in danger? The answer again is terribly simple. Two thirds were injured just going straight ahead, neither overtaking nor passing. In many instances the police reported a swerve, but few accidents are actually witnessed by the police. There must have been more swerves than are reported. Overtaking, and making a right turn, account for another quarter of the accidents. The rest of the actions were negligible.

53. The situation is obvious. The child cyclist, precariously balanced and unprotected, is allowed to go on our heavily trafficked roads untrained, inexperienced; with his back to following faster, heavier vehicles; with no means of seeing what is overtaking him or of signalling unless he turns his head and takes one hand off the handle-bars. Of course he swerves. And of course he pays the heaviest toll of the road.

54. The study on which this report is based has brought out for the first time the size of the child-cyclist risk. That risk discloses its true proportions only when the statistics are examined, as they have been for the purpose of this report, for each year of age separately, and when the sexes are considered separately.

55. Since the problem of the child cyclist now emerges as one which clearly must be tackled as a matter of great urgency, some reflections upon it are presented in the next section of this report.

V Three Significant Factors

(1) THE BICYCLE

56. The facts that are brought to light in this report are sensational, and ought to create a public clamour for remedial action. But even before this new evidence was available, experience and everyday observation had made at least the mothers in Britain aware that the peril of the child cyclist, and his menace to other road users, were intolerable. We recall the judgement of the Women's Institutes recorded already:

"No child should be allowed to ride a bicycle in the road unless he has passed a test as to his own fitness and the fitness of his machine . . . Competence as a performer (on a bicycle) comes more quickly than competence as a road user."

57. Precisely because of the seriousness of the problem, it is important to keep a sense of proportion. This report emphasises the danger of the bicycle; but its value, properly used, as a means of training young people to become responsible on the roads needs equal emphasis. There is far more to be said about the bicycle than that, thoughtlessly or unskillfully used, it is a dangerous possession to a child. Much indeed has been said: that the bicycle is the most useful and beneficent as well as the most revolutionary of modern inventions, for instance.

58. To its young owner the bicycle is several things at once. It is a symbol of his freedom and grown-up-ness. It is an exciting means of locomotion. It is probably his first piece of real machinery. It is stage one in his process of graduation as controller of a mechanical vehicle on the Queen's highway.

* * *

59. From the viewpoint of the community the last point has tremendous importance. At some age or other, under some conditions or other, the majority of human beings have to become efficient and responsible drivers on the road. Could we in fact devise any more

suitable instrument for the beginning of their training than the bicycle? Our roads being what they are, and being used for the incompatible purposes that are now established, first ventures into experience as a driver, no matter at what age or under what conditions, will exact a toll in casualties. At present a heavy part of that toll is debited to the bicycle, but some of it would be merely transferred elsewhere even if the bicycle were outlawed.

60. What is important is to make sure that every child who becomes a cyclist shall be thoroughly trained as a road user. To allow him the free use of the roads as soon as he can balance on a bicycle is to connive at his self-destruction.

* * *

61. The proper training of every child cyclist as a road user will not be accomplished without effort and determination. It calls for a great co-operative enterprise. A beginning has been made. The two schemes (the Cycling Proficiency Test, and the Cycling Safety League), devised and operated by the Royal Society for the Prevention of Accidents, the Cyclists' Touring Club, and the National Union of Cyclists, have already gone into action. It is no criticism of the schemes or their sponsors to say that such success as they have been able to achieve has not been on a big enough scale to touch more than the edge of the problem. Their main sphere of operation has been the schools; and so far as the bicycle is concerned what can be done through the schools is extremely limited. Few young children in towns use bicycles for travel between school and home, so that most town children, and many country children, do not normally come under school discipline or influence as cyclists.

62. Whatever the reasons, it is evident that the bicycle, and all that it has to contribute to the training of young road-users, must be seen

in a much wider context than anything that the school alone can provide. Parents, bicycle manufacturers, and probably Parliament, must all make their contributions, as well as the agencies that are already active in this field. Everything that can be done by intelligent, persistent and voluntary means must be done. But it would seem probable that Parliament and the appropriate departments of State must also act. Voluntary effort might perhaps be able to gather all its energies together in a "Better Cycling" enterprise. That could accomplish much. Yet it is hard to believe

that the minimum aim—that child cyclists at large on the roads shall be competent road users, mounted on bicycles that are properly designed and equipped and in sound mechanical condition—can be substantially and continuously achieved without legislative compulsion at several points.

63. Research, study, experiment and discussion are needed in order that the right kinds of propaganda and action can be discovered. A few suggestions along these lines are made in the later section of the report in which the Women's Institute judgements are reviewed.

(2) TRADESMEN'S VEHICLES

64. It would be unrealistic not to comment on the obvious fact that most children playing out of doors are playing in suburban roads, and that the most persistent disputer of their implicit claim to treat these roads as playgrounds is the tradesmen's delivery vehicle. The conflict of interests has serious consequences.

65. This particular aspect of road accidents to children was not specifically catered for in the details supplied of the 30,000 child casualties studied for the purposes of this report. The Road Research Laboratory are engaged on an analysis of goods vehicles involved in accidents, and this may well throw light on the details of the problem, but the results of their work are not available. At this stage, therefore, all that can be said is that the study that has been made for the purposes of *The Child on The Road* supports common knowledge, in that the risk for pre-school children is higher at the times when tradesmen's vehicles are operating in residential areas than at other times.

66. Let it be clear that no allegation is made against either the efficiency or the sense of responsibility of professional drivers as a class. Their accident rate per motor-mile is probably at least as good as that of any other drivers, and there may well be ground for the

claim that has been made on behalf of long-distance drivers of heavy vehicles that their accident record is exceptionally good.

67. There can be no question, however, that local delivery vehicles are the real invaders of residential thoroughfares. It is their business to operate in every such street and road, where they are constantly stopping and re-starting, and frequently reversing and manoeuvring. In contrast with the special responsibilities of the job, all too frequently a young fellow becomes a delivery-van driver as soon as he has passed his all-purpose driving test.

68. Chief Inspector H. W. White of the London Metropolitan Police put the case in a nutshell in an address at a R.S.P.A. conference seven years ago. He said :

"It takes 240 hours to make a police driver (3rd class), and other intensive courses before he becomes 1st class. Contrast that with the ordinary driver who may have had only six lessons of twenty minutes each."

69. Part of the problem we are reviewing arises from the circumstance that, although the toll of road accidents is intolerably heavy, the incidence of accidents is not. Even a van-driver of mature years and experience may never have heard that little children are often killed by reversing vehicles, and are so attracted

by stationary vehicles that they often creep underneath them. We cannot therefore take it for granted that van-drivers will know as a matter of course the vital things they ought to know. It is necessary to make certain that they know, and that their training shall provide for their education in such matters.

70. How seriously the responsibilities of a professional driver in such circumstances ought to be taken is indicated by the requirements of the London Transport Executive. They were summarised thus by Mr. G. Dodgson-Welles, Chief Public Relations Officer of L.T.E., in a letter to the *Evening News*, London, January 1, 1952 :

"All London Transport bus drivers are examined by our doctors before getting their licence. This is renewable every three years, and drivers over 50 are again required to undergo another examination. Bus drivers have eyesight tests on reaching the ages of 50, 55, 58, 60, 62, 64 and 65. Drivers are given a strict examination every year from 65 onwards. Drivers of all ages always have examinations after any ailment which occurred during driving duty—even for an absence of half a day."

71. 'Is not the driver of the tradesmen's vehicle properly seen in such a context as that, and not subject only to the very mild conditions attached to an ordinary driving licence and its renewal? How mild those conditions are was underlined in a leading article in the *Manchester Guardian* (December 28, 1951) :

"The form of application for a driving licence allows the applicant a generous indulgence to his own infirmities . . . Anyone who has ever held a licence can go on getting it renewed by giving himself the benefit of any doubt there may be about his physical fitness. Extreme old age is no legal barrier to taking a car on the road; an applicant is not even required to state his age as long as he is over twenty-one . . . many lives might be saved if a medical certificate had to be submitted with each application for a driving licence."

72. It may be that the whole conception of the licensing of drivers of motor vehicles needs to be reconsidered. The *Manchester Guardian* leader is only one of thousands of protests

against existing practice. We are not here concerned with the broader question, however, but with the special case of accidents to children. In that field we are bound to urge that a much higher standard of efficiency should be demanded before any person is authorised to drive a tradesmen's vehicle, and that there are neither technical nor political difficulties in the way of imposing it.

73. To begin with, there is no difficulty about defining the function. What should be imposed by way of test is also clear enough. Proof of age, if under twenty-one (if indeed it should be decided that such a licence should ever be granted to a person under twenty-one), and proof of physical fitness, would seem to be obvious. Equally important with physical fitness should be a searching test of the applicant's discretion and sense of responsibility. Emphatically the candidate ought to be examined to ensure that he is aware of the kinds of accidents to which his duties will make him especially liable. For the rest, the standards of the London Transport Executive should be considered.

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74. Not drivers alone need to be tested. Vehicles also ought to be certified regularly as to their mechanical efficiency and road-worthiness; and road-worthiness in this instance ought to have reference to a proper standard of visibility in reversing. Even when we have ensured that the design of the vehicle provides for proper visibility in this respect, it needs to be made an offence for a vehicle to be driven in reverse if it is loaded so as to impede visibility.

75. By common consent, professional drivers as a class are efficient, considerate and courteous. What is here urged is not a reflection upon them. It arises from consideration of the conditions under which many of them are required, by the nature of their duties, to operate, and of the toll that has been levied on children by those circumstances.

(Continued on next page)

(3) THE ROAD

76. We have hitherto concerned ourselves almost exclusively in this report with the problem of accidents to children arising from the use or misuse of our roads, in the condition in which we now find them, by the children themselves or by adult road users.

77. We wish, however, to avoid any impression that in our view the risks of accidents to children, as to their elders, are not increased by the generally unsatisfactory state of the country's road system. If the roads as a whole were made reasonably safe for considerate and intelligent road users, the children would certainly benefit from such improvement in due proportion to their numbers.

* * *

78. This truth is obscured by the unavoidable limitations placed on the information obtainable from national accident statistics. Police reports, the source of all official records, are quite properly descriptive of the conditions, as they existed at the time, in which each separate accident occurred. These reports do not and cannot take into consideration, and express a considered view upon, the problem of whether any particular accident might have been avoided if some appropriate road improvement had been carried out at the site of the accident, before the event. Profound and specialist knowledge of the effect of various kinds of road improvement on accidents, and appreciation of the practical possibility of the appropriate improvement being executed by the highway authority in each case, would be necessary in order that reports on this aspect of the matter could be accepted as having statistical value. It is wiser therefore not to ask for them, but the omission must not be allowed to blind us to the fact that any real attack on road accidents must include plans for the comprehensive removal of road defects.

79. The simplest illustration of the effect of road conditions on accident frequency may be found in the fact that nearly half of all road accidents occur at or within fifty yards of a road

junction. There is approximately one road junction for each mile of road. Therefore, on average it is some sixteen times as dangerous to be within fifty yards of a road junction as to be elsewhere on the road. The mental attitude or capacity of a road user does not alter when he is near a road junction, but the conditions do, and so does the risk rate. Doubtless the traffic conditions at road junctions will always create special danger, but the design of junctions could usually be improved, but for the expense involved, so as to reduce the heavy extra risk to a minimum.

80. In Oxfordshire before the war the County Council, by the experiment of improving sixty rural road junctions, secured a substantial reduction in the accident rate at these sites, the cumulative effect to date being that 50 lives and 80 serious injuries have been saved at a cost of £30,000. These improvements had been carried out after the County Surveyor had examined reports on all fatal accidents in the County over a period of four years, and had reported that substandard design of the roads had played its part in 75% of these accidents. The police reports, quite properly, did not refer to these defects, so that they were not statistically recorded.

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81. It will be seen that we do not here refer to defects of the surfaces of our roads, which are reasonably good, but to the lay-out of the road system, in general and in detail. There is ample evidence both in this country and from American sources of improvement in the accident rate through the adoption of safe designs. This was recognised by the Alness Report of 1939 which recommended that, in the interests of safety alone, a vastly accelerated programme of road construction and improvement should be undertaken. To-day, except for a trivial scheme by the Government to spend £3,000,000 on the improvement of "black spots" (this will permit perhaps ten small improvements to be made in each county area), no improvements are being undertaken

at all. The position is indeed being made even worse by the rigid insistence of the Government that, even when expensive maintenance works are being undertaken, not even the most trivial purchase of land may be made to permit local improvements at danger spots. The inadequacies of the existing road system are being thus preserved and made more difficult and expensive to remedy in the future.

82. It is of course true that a majority of accidents to children occur in built-up areas where road improvements, although by no means impossible, are more difficult to make than in the country. In the national statistics, however, "built-up areas" are taken as those in which a speed limit is in force, and thus include all small towns and villages as well as the large cities and boroughs. It is such smaller centres of population which would benefit most by the building of by-pass roads, the remedy of segregation, the engineering improvement on which the Alness Report laid

most stress, being here particularly appropriate and effective.

83. We believe that the national road system should be fundamentally recast, by the construction of a skeleton system of motorways and the drastic improvement of the existing roads, in the interests of our national economy. We also believe that if this were done, accidents would be reduced in frequency, including accidents to children.

84. We think that the kinds of road improvement calculated to save most accidents are by-passes where heavily trafficked roads at present pass through towns and villages ; and the removal by local realignments and widenings of black spots such as sharp and blind bends, dangerous junctions, and narrow and hump-backed bridges. To be effective this should be done on a comprehensive scale. The present proposal to spend £3,000,000 for these purposes in two years is a mere token vote and almost derisory.

VI *How Propaganda can be Improved*

Official concern with the problem of road accidents is proved—if it needs to be proved—by the admirable work of the Road Research Board, the Police organisations, the Royal Society for the Prevention of Accidents, and the Safety Committees that are alert and active almost everywhere. And also in the schools where systematic training in Road Safety is skilfully and carefully carried out.

Yet in one important respect results are unsatisfactory: admittedly unsatisfactory, for there are persistent bitter complaints of public apathy, and such complaints amount to a confession of failure to instruct and move public opinion. Commercial propagandists do not complain of public apathy: they blame themselves if they fail to provoke active public response to their messages.

The British public is *not* unconcerned about road casualties. If it appears to be apathetic it is because, when people are constantly told that a problem is vast and at the same time are given the impression that there is not really much that anybody can do about it, they inevitably try to dismiss the problem from their minds. The policy of successive Governments has actually, although of course inadvertently, connived at such a situation. For the last fourteen years at least it has been the deliberate policy of Governments, unable to devote adequate funds and manpower to road maintenance and improvement, to emphasise that practically all accidents are simply the result of human frailty.

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Thus, most road-safety propaganda addressed to the general public adds up to little more than a general "Do be careful" exhortation. That kind of flabby appeal can inspire only a flabby response.

Most people are sure that they are already habitually careful. Some accidents, indeed, certainly must be caused by people who are habitually irresponsible; but the vast majority of all accidents are the result of momentary forgetfulness or stupidity. And every human being is occasionally forgetful or stupid.

Indeed, to say that human failure is the cause of 90% of accidents is to say not much more than that accidents are accidents.

Every publicist knows that if he wants a response from the public he must make specific submissions. To say to the public "Do be careful" is to invite what will look like apathy. If, on the other hand, one takes a specific road-safety point, the means of putting it across to the public can easily be indicated. Although it is impossible to move the public by saying "Do be careful," it is obviously possible, to take a single example, to teach the pedestrian public to

*"Walk to the Left on the footpath,
Walk to the Right on the Road."*

The road-safety point we have used for the purpose of this example is in fact an important one, for further reflection upon it will furnish dramatic proof of the contention that the elaborate and for the most part admirable organisation directed in this country towards road safety, breaks down badly in getting its message over to the general public. The fact that it is much more dangerous to walk on the left of the highway than on the right was established long ago. The fact indeed finds expression in the Highway Code. The more precise fact that it was about twice as dangerous was established by the Road Research Laboratory in 1950. Yet, on the appalling evidence of the Gillingham disaster in December, 1951, the fact had not been communicated effectively even to appropriate Government Departments more than a year later, much less to the general public.

* * *

Road-safety propaganda in this country is certainly open to the charge that it has befogged the public with generalities, bewildered the public with masses of detail, and concerned itself far more with the provision of a vast variety of propaganda material than with the effective use of much of it.

This is not an attack upon any Ministry, any department, or any official or semi-

official organisation. It is merely pointing out that there is an important and remediable breakdown in the system of communications. Road-safety propaganda is not at present under any kind of expert centralised direction.

When in 1945 the Ministry of Transport was authorised to spend something like £250,000 a year on road safety advertising, it laid out that sum skilfully under expert advice. When, however, upon the representation of the Select Committee of Estimates five years later the Government of the day axed the fund, the highly efficient publicists who had planned the advertising campaign were somewhat precipitately dispersed. It thus was not anybody's business to consider whether it was possible to do what the advertising scheme was trying to do even though funds were no longer available.

We submit that excellent alternative means of propaganda were available. Spending money is sometimes just the lazy way of doing a job, and to have the money withdrawn has often proved a spur to enterprise. There were, and are, many channels of effective communication open to road-safety propagandists at no significant cost to public funds.

One of them specifically commended by the House of Lords' Committee on the Prevention of Road Accidents as long ago as 1939 was that old people should receive suitable warnings periodically with their pension payments. This suggestion fell on stony ground, despite the known fact that hazards of the road greatly increase with advancing age. It is surely beyond argument that the process of paying old-age and retirement pensions presents, not only a possible way of communicating with elderly folk, but the ideal way.

At the other end of the problem of road accidents—the children, with whom this report is more particularly concerned—facilities for effective safety-education are numerous and even more comprehensive. From conception onwards—and by no means only in the schools, which have in fact been most sedulously and effectively used as a means of training in road safety—the child and his mother are constantly accessible to the Welfare

State. Not only are there innumerable forms, explanatory and otherwise, involved in the payment of Maternity Benefit and Family Allowances, birth registration and so forth, but very many mothers pay regular visits to Clinics both before and after the child's birth.

We submit that Britain has here a first-class system of communication waiting to be used by road-safety propagandists. The document which an expectant mother (and surely the expectant father also) will study with care for information on Maternity Benefit; and even more the later documents concerned with the infant's welfare; might most fittingly and effectively have things to say about the characteristic hazards of the roads and the surprisingly early ages at which children become victims. Family Allowance forms could be a propaganda medium of quite unusual power, for the precise age of each child beneficiary is known, and it is therefore possible to grade the messages in accordance with the known variations in accident experience at different ages and for each of the sexes.

Certainly on the walls of the Infant Clinics there ought to be, in addition to the advertisements of baby foods which already show that the world of commerce appreciates the medium, road-safety educational messages.

Other obvious and valuable channels for the regular flow of road-safety propaganda are offered by the processes of renewing driving and vehicle licences. In each instance there is enough information in the hands of the authorities for safety messages to be pointed. For instance it is known whether the vehicle for which a new licence is being issued is a private car, a delivery van, a heavy lorry, or a motor cycle; and many of the young fellows whose experience as motor cyclists represents one of the blackest spots in accident records, hold a licence only to drive a motor cycle, so that they too are easily addressed in relevant terms.

At present driving-licence renewal does require us to declare that we are familiar with the Highway Code, but cannot be any more to many people than a mild reminder that it is in fact a very long time since they set eyes on

a copy of the Highway Code. Might not points from the Highway Code be displayed at all petrol stations, which are indeed good sites for all sorts of road-safety notices? And what about the innumerable transport cafes run by people of complete good will almost as clubs for professional drivers?

In Britain the insurance companies—unlike the insurance companies in U.S.A.—have not felt called upon to take a leading part in road-safety education, although the operation of the no-claims concession on renewal premiums must have exercised an important steady pressure in the direction of safe driving. It is evident, however, that they have regular contacts with the road-using public that could have great value as means of road-safety education.

• • •

These are some of the more obvious means of communication that are waiting to be used at practically no cost. There are certainly many others.

For instance, Scotland Yard Statisticians have demonstrated that 88 per cent. of accidents to people getting on and off London buses (about 2,500 accidents per annum) happen elsewhere than at official stopping places. That is to say, many people are injured and some killed every year through getting on and off buses when they are held up by traffic lights or traffic jams, or when they are actually on the move. The public is simply unaware of this fact and of the large number of accidents involved, but is not so stupid or apathetic that it would not take warning if, in every bus, the facts were as plainly stated as already, in London buses, we are instructed in the simple technique of halting a bus at request stopping-places. Here then is another example of the ready availability of ideal means of communicating a significant fact to the public that it concerns.

There are in addition very many valuable means of communication, not actually under the control of public authority, but available if their co-operation is sought. We have in fact turned to a number of organisations whose co-operation would be valuable, and in every instance we have been assured that they would

most willingly co-operate. For example, several official reports on road safety have urged that suitable notices might usefully be displayed in hotels and public houses. We were interested to discover, not only that the Brewers' Association is willing to co-operate in this matter, but that it has already played its part in road-safety weeks and become a substantial contributor to the Royal Society for the Prevention of Accidents with whom it has worked out a series of suitable Posters for exhibition on licensed premises.

In the U.S.A. where road-safety propaganda is actually undertaken much more by the insurance companies and other road interests than by any department of government, there are many truly remarkable examples of willing service to the community. A striking example is the nation-wide campaign conducted by Outdoor Advertising Incorporated of New York at a cost, borne by itself, estimated at several million dollars.

One of our inquiries was to the British Poster Advertising Association, by whom we were at once assured, in principle, that they would gladly perform a similar service in Great Britain.

• • •

This chapter is not meant to be a comprehensive statement of all the means of communication that are waiting to be used in this country for road-safety education. We have given here only a few fairly obvious examples. What is needed is that it should become somebody's business to scrutinize, with a publicist's eye, the facts established by the Road Research Board or by common experience, deciding which facts need most urgently to be communicated to the public and, in certain instances, which departments in our public life are most concerned with the particular fact.

Whenever suitable means of communication are already under the control of public authority, the right to make use of them should be automatic. When the means are not under the control of public authority, we are satisfied that co-operation is almost certainly to be had for the asking.

VII Judgements of Women's Institutes Reviewed

It may now be useful to compare under general headings, the points made by the Women's Institutes, with the facts brought out

by the detailed study of the accidents ; to draw certain conclusions ; and to indicate possible lines of action.

1. RESPONSIBILITY FOR THE SAFETY OF CHILDREN

(a) Institutes' View

Responsibility for the safety of children during the early years, before even the simplest training can start effectively, rests upon parents. Supervision of younger children by older children is not good enough. When the child becomes old enough to be instructed, the prime responsibility still rests upon parents, who must make themselves familiar with the Highway Code. In due course that responsibility can be shared by school teachers, police, and other adults.

(b) Comments

The facts set forth in this report bear out the Institutes' views. For instance, risk rates are lower on Sundays, and at other times when children are normally in their parents' charge ; higher on Saturday mornings when children may be in the care of older children. Many points established are worth careful study, especially what is brought to light concerning the special risks in different age-groups, and the particularly dangerous periods of the days and seasons. One point of encouragement is the striking decline in risk rates as young pedestrian school children advance in age.

The new Highway Code, now being prepared, will doubtless be an even more valuable guide than the old.

(c) Possible Action

Traffic police are being increased and the use of adult crossing-patrols at the appropriate hours at school crossings extended. That is action of the right kind. There is no point in pressing for a 30-miles-per-hour speed limit at these points, because the danger occurs only at certain hours, and at those times 30 miles per hour is too fast.

It is important that parents should support the school in insisting that their children should obey the school crossing officer. Older children sometimes try to show off by deliberately crossing elsewhere than at the supervised points, thus setting a bad example to younger children. Doubtless there are other follies that call for continuous co-operation between parents and schools.

2. EDUCATING THE PUBLIC

(a) Institutes' View

A continuous Educational campaign is needed, directed towards parents and all other adults who are in any way concerned with children, and to the older children themselves.

(b) *Comment*

The frightful number of intolerable risk rates set forth in the tables and constantly referred to in the text of this report, shows the clamorous need for a continuous educational campaign.

Spectacular disasters, such as the East Coast floods in February this year, or the Lynmouth tragedy of last summer, generate their own publicity. Yet the toll of life exacted by both put together was small by comparison with the continuing toll of the roads which, because it is an everyday toll, almost ceases to be news.

(c) *Possible Action*

Road-safety propaganda ought never to be handicapped, as it has been for the last three years, by Government 'economy.' Much can be done at little or no cost to public funds, as we have tried to show in the section of this report devoted to the subject. Technical difficulties, which should not however be exaggerated, are involved in any continuous educational campaign, and the job cannot be done without funds for two reasons. First, it is necessary to attack the public persistently through all sorts of media, and not be limited to the useful ones that happen

to be available without cost. Second, continuous propaganda, concerned as in this instance with a continuing problem, demands expert planning and direction. That must be provided and paid for, as it is in any business enterprise that has a product to sell. The technical problems are not formidable.

As to the content of the educational campaign—the message as distinct from the means of communication—it must deal in precise facts and not general 'be careful' exhortation. Many such facts are indicated in this report and now need to be 'put across.' This report, however, is largely concerned with peak risks, and there are lesser peaks that are important enough to call for further study.

An examination of the usefulness of Road Safety Committees, as at present conceived and constituted, is also needed. There would seem to be a question as to whether they are not in danger of becoming a sop to the public conscience. Safety officers, for instance, are sometimes part-time workers in the field of road safety who are primarily employed as members of the local authority engineering staff. They may not themselves have, or have at their disposal, expert knowledge of the techniques of propaganda.

3. SPEED OF VEHICLES

(a) *Institutes' View*

Motorists should be compelled in their own interests to reduce speed in roads frequented by children, and the 30 m.p.h. limit should be much more widely imposed, whether the roads in question have lamp standards at prescribed intervals or not.

(b) *Comment*

The need for extreme care by drivers wherever children are about is reiterated in the report. As to the extension of the speed limit, it is pointed out :

- (i) That it is already an offence against the law to drive to the public danger, no

matter at what speed, and irrespective of whether the area is subject to a speed limit. The problem is to enforce the law. Again we welcome the strengthening of traffic police ; yet there never can be enough police to cover all the roads all the time.

- (ii) That the widely held belief that a speed limit cannot be imposed unless there are street lamps at certain intervals is not valid. Many Institutes seem to have had experience of applications being turned down on these grounds. They are advised that they are fully entitled to brush aside any such representations.

It is not surprising that many of the Institutes plead for a much wider application of the 30 m.p.h. speed limit. Yet it has to be said that designation of certain areas as subject to this speed limit is a tool of limited value. It is probably necessary on practical grounds to accept it as a fact that the present total mileage of speed-restricted road is just about as much as is possible. Otherwise the speed-limit device, which of course is a compromise, is in danger of being treated with contempt, and we shall be worse off rather than better.

But even if that be accepted in principle, there still remains the question whether a better allocation of speed-limited mileage is not possible. It can be argued that speed limit is often imposed sooner than it need be in the approaches to towns, and that there are miles of such roads where the discipline of speed limit is far less needed than it is in many a no-speed-limit village.

We find it impossible to dismiss the submission of some of the rural Institutes that, whereas prosecution for exceeding a speed limit is a simple matter, a charge of driving dangerously in a no-speed-limit area is much more difficult to establish; and that in consequence such charges tend not to be made unless there has actually been an accident. Even so, we still have the fact that about 90 per cent. of accidents to children in 1951 occurred in speed-limited areas. Clearly, therefore, the remedy so often pressed for by the Institutes does not go to the root of the problem.

We submit that the problem is really two problems which call for quite different remedies. First, there is the matter of fast

motor traffic passing through suburbs and villages. Second, we have the quite different menace of local traffic, constantly operating in residential roads. In the following paragraphs these two problems will be considered separately.

(c) Possible Action

- (i) The effective way to deal with the problem of fast motor traffic passing through villages is by-passing the villages. Sooner or later that course will have to be taken. We are assured that the only arguments against getting on with the job are economic: present conditions are said to be unfavourable to devoting the necessary man-power and materials to it. If, however, public opinion should demand the re-designing of our roads in this respect, it can carry its point.

We draw attention to the finding of this report that stepping off the pavement is an even greater source of danger to young pedestrians than crossing the road. There is therefore a strong case for the extended use of guard rails wherever suitable. Young children must be taught to *keep on the pavement*. And as soon as a child can be taught the difference between 'right' and 'left' he should learn also the pedestrian's rule:

*Walk to the left on the footpath :
Walk to the right on the road.*

- (ii) As to the danger from vehicles operating in residential roads, we repeat that a 30 miles-per-hour speed limit, or indeed any other specified figure, does not meet the case. Safe speed will often be very much less than 30 or even 20 miles per hour.

The most vigorous action is needed to impress this matter upon the drivers to whom it applies. Points that arise cannot properly be surveyed in this section of the report, and are the subject of a separate note on pages 18 and 19.

4. BICYCLES

(a) *Institutes' Views*

Young children should not be allowed to ride tricycles and scooters on pavements without supervision and should be prohibited from riding on the roadway. No child should be allowed to ride a bicycle on the road unless he has passed a test as to his own fitness and the fitness of his machine.

(b) *Comment*

The sense of acute danger felt by the Institutes is emphatically justified by the facts. Risk rates for child cyclists that achieve a peak two or three times as high as the highest risk recorded for child pedestrians, are appalling. Further comment is unnecessary since the problem is surveyed in a separate section of the report.

(c) *Possible Action*

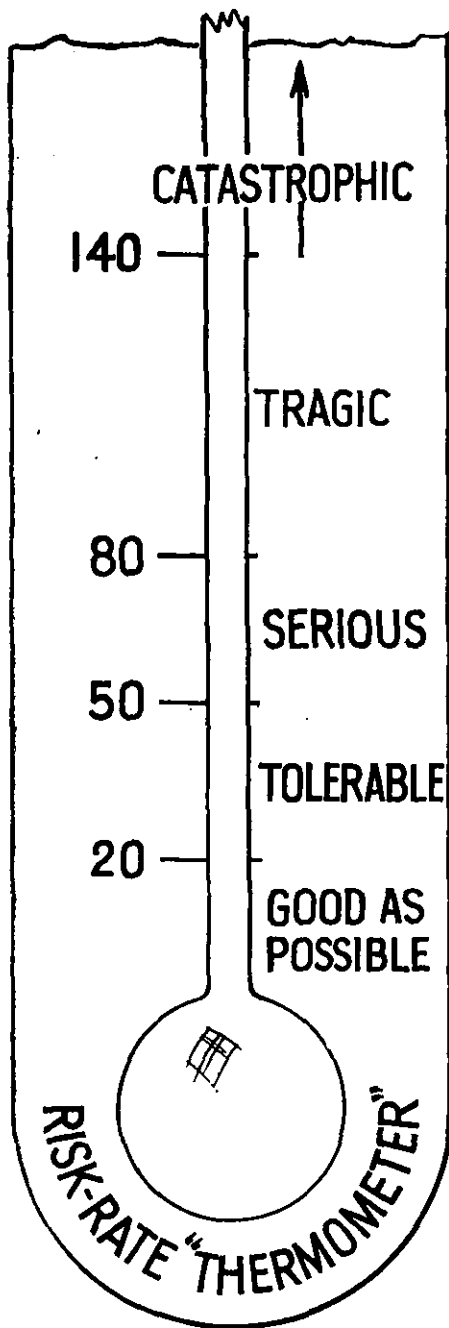
Here again we refer readers to the section of this report devoted to the bicycle. We plead once more for hard thought. Much can be done by voluntary enterprise to encourage better cycling. After all, few children will ever come by a bicycle except by the connivance of an adult. Since we shall continue to give bicycles to children, we incur responsibility for seeing that they are taught to keep alive when using them. The problem of the child cyclist needs to be discussed thoroughly, so that the proper remedies may be discovered. For instance: Are boys better cyclists for being trained for the exhilarating sport of cycle speed-tracks ('Skid Kids')? Are they more sensible on the roads—or can they be trained to be—because they have this proper outlet for their adventurous spirits? If so, can this splendid sport be encouraged in every

village? This is one of many devices that might be discussed and, if approved, encouraged.

There is in this judgement of the Institutes, however, a strong feeling that voluntary action will not be enough: that there will have to be important elements of compulsion. If that be sound reasoning—and we believe it is—there should be no hesitation about campaigning vigorously for any necessary change in the law.

Compulsory tests of efficiency for child cyclists would seem to be essential. (We emphasise that we speak only of *child* cyclists, for our study has been restricted to children). Compulsion may have to go further. It is part of the child cyclist's peril that he cannot see behind him, or give a sign that he means to turn, without physical movements that are almost bound to produce at least a slight swerve. Probably a driving mirror ought to be made part of his equipment, and possibly also some kind of simple direction indicator that he can operate without taking a hand off the handlebars.

It is absolutely necessary to get away from the hopelessly out-of-date idea that the child cyclist may rely upon all other road-users for his safety. He is not fit to be on the roads until he understands that he must look after himself, and is trained and equipped to do it.



RISK RATES TABLES AND GRAPHS

In the following pages, the Risk Rates at different ages are set forth, first in separate tables for boys and girls, then in graphs.

In the tables tragic risk rates (over 80 but under 140) are printed in red type. Catastrophic risk rates (140 and over) are printed in bold red type.

The graphs (pages 34-41) express the figures and the other classifications of the tables, but eliminate the passenger risk rates and present only the pedestrian and cycling risks, in red and black respectively.

BOYS

RISK RATES AT DIFFERENT AGES (1951)

(All as per 10 million per day)

Age			Under 3	3-4	4-5	5-6	6-7	7-8	8-9
SUNDAYS during School Terms	February	Pedestrians Passengers Cyclists	5 5 —	25 15 —	15 15 —	40 10 —	45 20 5	20 15 15	15 5 —
	May	Pedestrians Passengers Cyclists	5 20 —	75 50 —	90 55 —	55 45 15	70 25 5	75 80 30	40 15 40
	June	Pedestrians Passengers Cyclists	30 15 —	65 60 —	110 50 —	120 55 —	60 50 25	85 30 50	60 30 60
	October and November	Pedestrians Passengers Cyclists	20 10 —	45 20 —	80 35 —	85 20 —	60 20 5	50 15 25	45 25 30
MONDAYS—FRIDAYS during School Terms	February	Pedestrians Passengers Cyclists	20 5 —	65 15 —	110 10 5	160 15 5	200 30 10	150 25 10	130 10 15
	May	Pedestrians Passengers Cyclists	30 5 —	120 15 5	170 20 5	210 30 10	200 25 25	160 30 30	110 20 40
	June	Pedestrians Passengers Cyclists	35 10 —	130 25 5	150 20 10	170 20 15	150 35 15	130 25 30	110 10 40
	October and November	Pedestrians Passengers Cyclists	25 5 —	110 20 —	120 25 5	220 25 5	180 20 5	180 20 15	130 20 25
SATURDAYS during School Terms	February	Pedestrians Passengers Cyclists	30 15 —	75 20 —	130 35 10	120 10 20	140 5 —	120 30 5	110 20 5
	May	Pedestrians Passengers Cyclists	25 20 —	140 15 10	200 65 15	200 35 20	200 50 20	120 30 30	140 35 40
	June	Pedestrians Passengers Cyclists	60 20 —	140 60 —	120 45 10	170 45 20	220 25 15	180 40 55	130 40 100
	October and November	Pedestrians Passengers Cyclists	30 10 —	120 35 —	140 25 5	220 60 5	140 20 10	240 25 30	130 30 40
HOLIDAYS	Easter	Pedestrians Passengers Cyclists	20 10 —	95 10 5	150 30 5	180 35 —	180 25 15	140 25 30	140 30 30
	August	Pedestrians Passengers Cyclists	30 10 —	110 35 5	150 40 10	140 45 15	140 40 20	130 30 40	100 35 65
	Christmas	Pedestrians Passengers Cyclists	10 5 —	55 15 —	65 20 —	120 20 5	80 15 —	100 30 10	110 25 15

RISK RATES AT DIFFERENT AGES (1951)

BOYS

(All as per 10 million per day).

9-10	10-11	11-12	12-13	13-14	14-15	15-16	Age		
45 5 —	25 15 10	15 5 20	10 15 60	5 5 45	30 35 30	5 5 55	Pedestrians Passengers Cyclists	February	SUNDAYS during School Terms
20 45 45	25 10 55	— 15 90	10 30 90	— 5 130	— 15 120	15 55 230	Pedestrians Passengers Cyclists	May	
40 55 55	50 40 190	30 10 130	30 40 150	25 30 280	30 10 400	15 15 490	Pedestrians Passengers Cyclists	June	
60 30 30	30 20 40	10 15 50	5 20 85	20 10 100	15 25 150	15 25 130	Pedestrians Passengers Cyclists	October and November	
80 15 20	65 10 30	35 25 45	55 25 55	25 10 60	20 10 60	25 20 140	Pedestrians Passengers Cyclists	February	MONDAYS—FRIDAYS during School Terms
90 15 65	45 10 60	40 15 100	40 25 130	30 35 130	25 25 160	10 25 220	Pedestrians Passengers Cyclists	May	
80 15 65	50 10 65	50 5 85	20 10 150	40 15 190	25 20 180	10 25 240	Pedestrians Passengers Cyclists	June	
95 15 30	75 10 40	50 20 75	45 20 85	35 20 120	25 20 150	20 15 220	Pedestrians Passengers Cyclists	October and November	
110 30 30	80 15 10	30 15 70	65 15 45	45 15 65	50 20 60	25 15 130	Pedestrians Passengers Cyclists	February	SATURDAYS during School Terms
190 40 40	40 40 130	100 5 160	30 45 110	30 5 150	45 45 240	— 30 240	Pedestrians Passengers Cyclists	May	
45 25 75	95 40 180	85 30 210	70 10 250	35 35 120	20 25 220	25 10 380	Pedestrians Passengers Cyclists	June	
110 30 45	90 25 90	60 20 130	65 55 180	60 25 180	25 25 190	25 50 220	Pedestrians Passengers Cyclists	October and November	
100 30 35	95 25 55	65 25 55	35 20 100	35 30 100	30 25 170	15 25 180	Pedestrians Passengers Cyclists	Easter	HOLIDAYS
80 40 95	70 30 110	45 25 140	40 40 170	30 30 220	15 25 200	20 30 300	Pedestrians Passengers Cyclists	August	
100 15 30	45 15 30	45 10 40	40 30 50	30 15 75	40 25 70	20 20 110	Pedestrians Passengers Cyclists	Christmas	

GIRLS

RISK RATES AT DIFFERENT AGES (1951)

(All as per 10 million per day)

Age			Under 3	3-4	4-5	5-6	6-7	7-8	8-9
SUNDAYS during School Terms	February	Pedestrians Passengers Cyclists	— — —	10 — —	20 10 —	35 15 —	20 5 —	15 15 5	10 10 —
	May	Pedestrians Passengers Cyclists	15 5 —	35 45 —	65 25 —	110 30 10	60 45 5	85 20 5	20 20 15
	June	Pedestrians Passengers Cyclists	20 35 —	40 30 —	95 40 —	80 30 15	55 15 20	35 20 5	45 30 10
	October and November	Pedestrians Passengers Cyclists	5 10 —	30 20 —	30 15 —	60 35 —	40 5 5	25 5 5	25 10 5
MONDAYS—FRIDAYS during School Terms	February	Pedestrians Passengers Cyclists	5 — —	45 15 5	45 10 5	70 10 —	90 20 5	90 10 5	80 10 —
	May	Pedestrians Passengers Cyclists	15 10 —	60 15 —	95 15 —	110 15 —	120 20 —	120 15 5	85 15 10
	June	Pedestrians Passengers Cyclists	35 5 —	80 15 —	95 30 —	130 25 —	100 20 5	80 10 —	80 15 10
	October and November	Pedestrians Passengers Cyclists	15 5 —	60 15 —	60 15 —	110 20 —	100 15 —	90 10 5	85 10 10
SATURDAYS during School Terms	February	Pedestrians Passengers Cyclists	— 10 —	60 25 —	40 5 —	90 5 —	55 20 5	75 — —	80 20 —
	May	Pedestrians Passengers Cyclists	30 10 —	70 35 —	170 50 —	100 65 —	130 15 5	75 15 30	65 35 35
	June	Pedestrians Passengers Cyclists	45 20 —	95 50 —	120 20 5	120 30 5	130 55 5	120 65 10	80 20 10
	October and November	Pedestrians Passengers Cyclists	20 10 —	65 25 —	100 15 —	65 15 —	80 35 5	110 20 15	120 20 10
HOLIDAYS	Easter	Pedestrians Passengers Cyclists	10 5 —	70 10 —	95 20 —	100 20 —	110 20 10	65 20 5	85 30 10
	August	Pedestrians Passengers Cyclists	25 15 —	60 25 —	90 25 —	70 30 —	85 25 5	70 30 5	60 25 10
	Christmas	Pedestrians Passengers Cyclists	5 5 —	25 15 —	30 20 —	65 20 —	40 15 —	55 15 —	45 15 5

RISK RATES AT DIFFERENT AGES (1951)

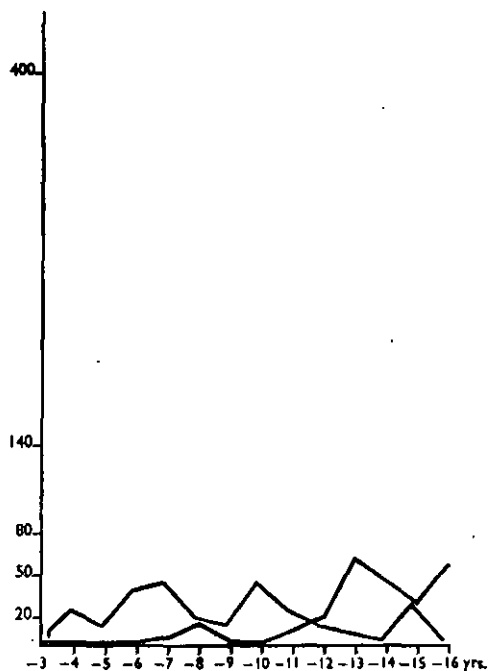
GIRLS

(All as per 10 million per day)

9-10	10-11	11-12	12-13	13-14	14-15	15-16	Age		
—	—	40	5	5	5	15	Pedestrians	February	SUNDAYS during School Terms
25	—	—	—	5	5	5	Passengers		
—	10	10	—	—	—	—	Cyclists		
30	10	—	15	15	15	15	Pedestrians	May	
10	65	15	15	30	5	30	Passengers		
25	50	10	45	30	55	65	Cyclists		
80	25	40	15	15	10	30	Pedestrians	June	
15	20	25	40	30	25	25	Passengers		
10	25	25	70	45	95	200	Cyclists		
25	10	10	10	10	10	25	Pedestrians	October and November	
10	30	15	15	15	5	15	Passengers		
15	5	5	20	15	30	5	Cyclists		
55	45	40	30	40	20	20	Pedestrians	February	MONDAYS—FRIDAYS during School Terms
10	—	10	10	20	15	20	Passengers		
5	5	5	20	20	10	30	Cyclists		
60	40	50	35	25	30	25	Pedestrians	May	
15	20	15	15	15	5	25	Passengers		
20	30	45	45	60	65	85	Cyclists		
65	40	40	35	35	20	15	Pedestrians	June	
15	5	20	20	10	5	10	Passengers		
15	20	40	60	50	90	100	Cyclists		
60	55	50	30	30	20	25	Pedestrians	October and November	
15	10	5	10	10	15	20	Passengers		
15	5	20	25	35	30	50	Cyclists		
80	75	25	55	45	25	5	Pedestrians	February	SATURDAYS during School Terms
25	10	5	25	15	15	5	Passengers		
—	15	30	5	—	15	5	Cyclists		
50	35	50	30	25	25	5	Pedestrians	May	
10	60	30	40	25	15	15	Passengers		
40	35	50	55	70	50	85	Cyclists		
60	25	40	65	25	25	5	Pedestrians	June	
50	40	25	20	25	25	15	Passengers		
40	60	55	80	55	150	120	Cyclists		
110	40	55	40	25	10	15	Pedestrians	October and November	
30	20	10	30	10	10	10	Passengers		
30	25	35	55	45	60	40	Cyclists		
50	60	40	40	25	25	25	Pedestrians	Easter	HOLIDAYS
20	25	20	15	20	15	30	Passengers		
15	20	15	30	30	40	55	Cyclists		
60	50	30	25	30	5	20	Pedestrians	August	
25	30	30	30	20	25	25	Passengers		
20	40	45	50	45	85	100	Cyclists		
35	45	20	40	40	20	30	Pedestrians	Christmas	
20	10	5	10	15	15	25	Passengers		
5	10	—	15	10	15	20	Cyclists		

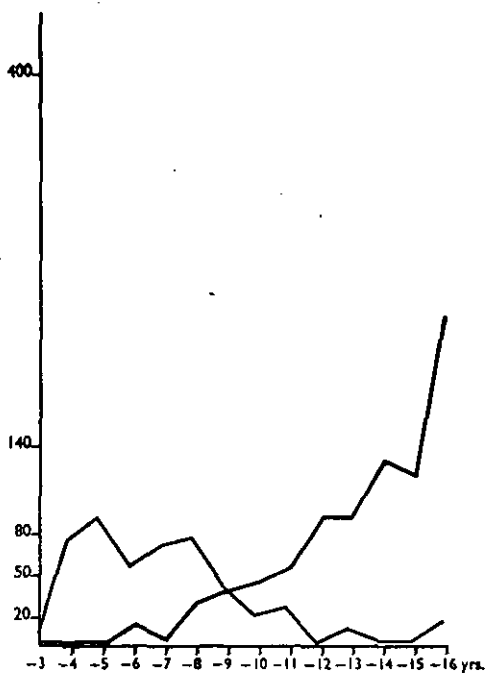
BOYS

FEBRUARY

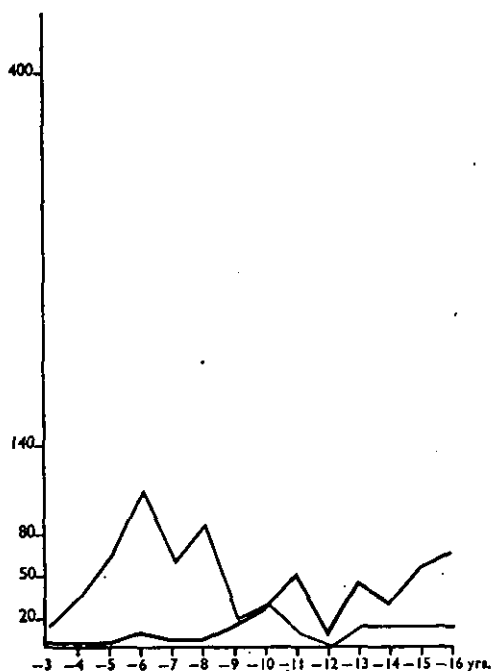
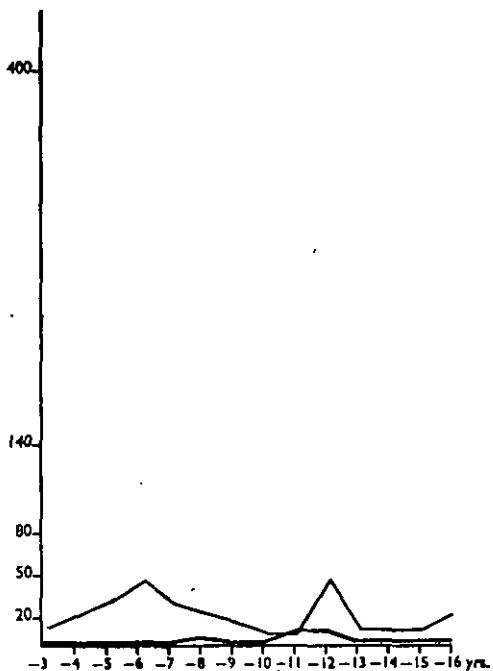


SUNDAYS DURING

MAY



GIRLS



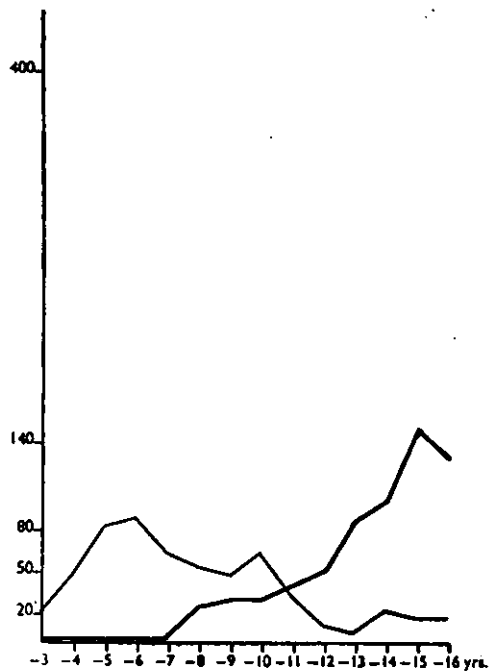
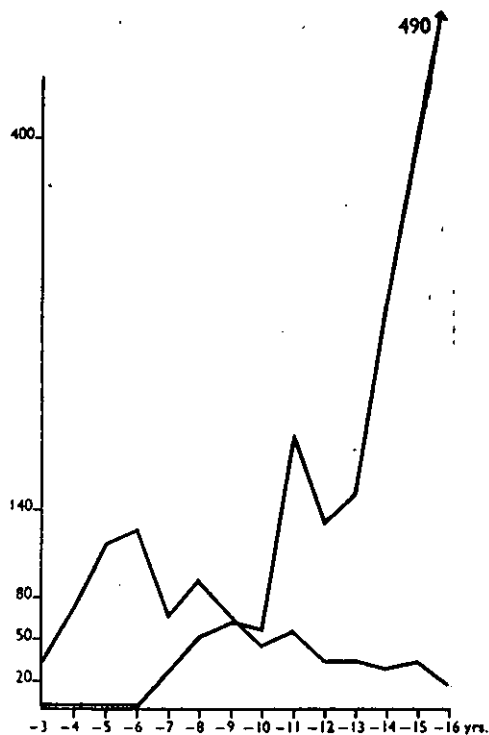
Pedestrian Risk —

SCHOOL TERMS

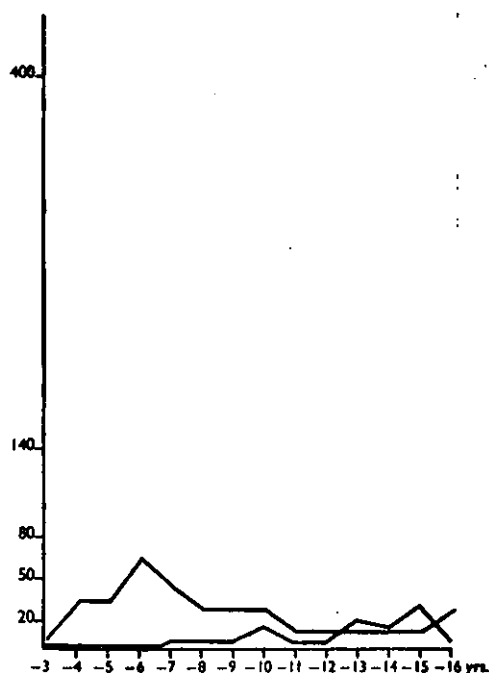
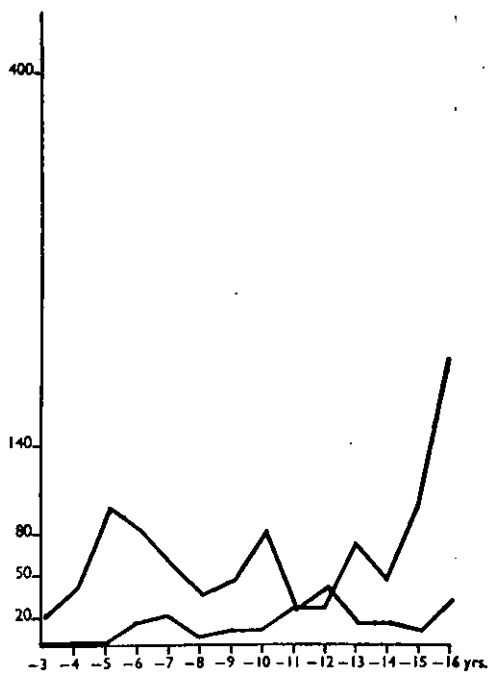
BOYS

JUNE

OCTOBER/NOVEMBER



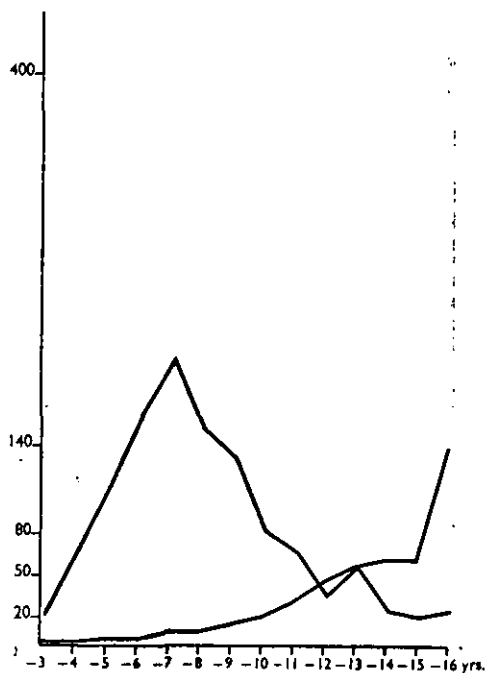
GIRLS



Cyclist Risk —

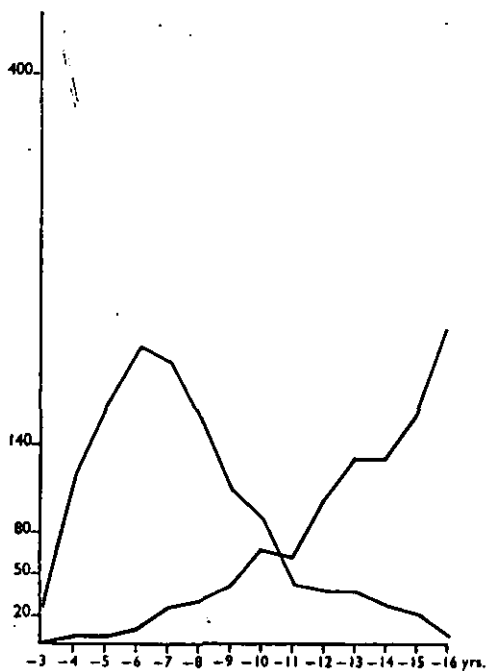
BOYS

FEBRUARY

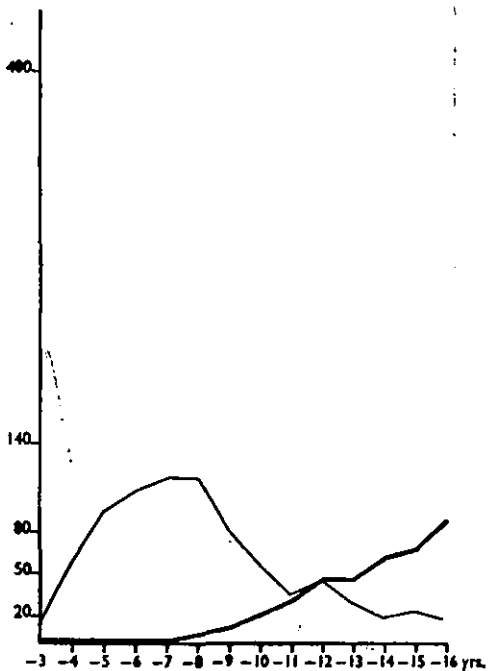
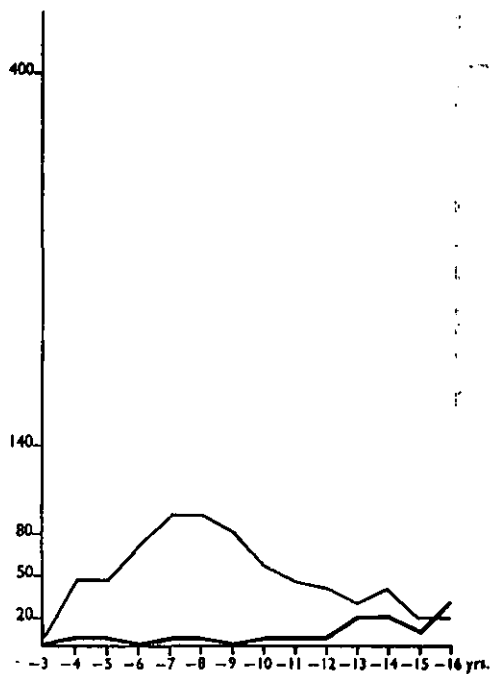


MONDAYS TO FRIDAYS

MAY



GIRLS



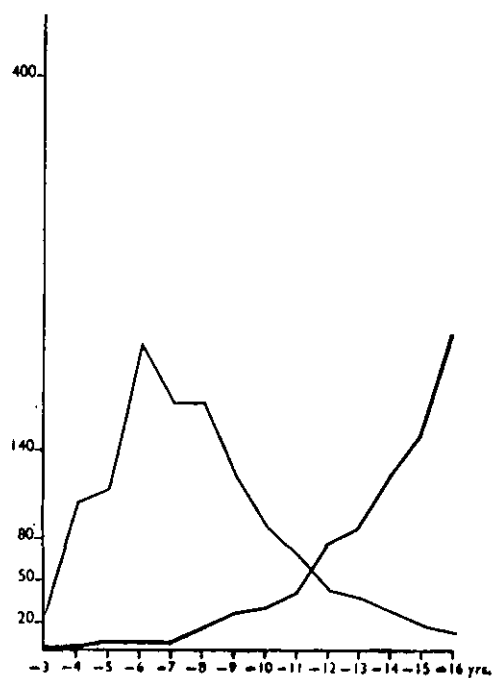
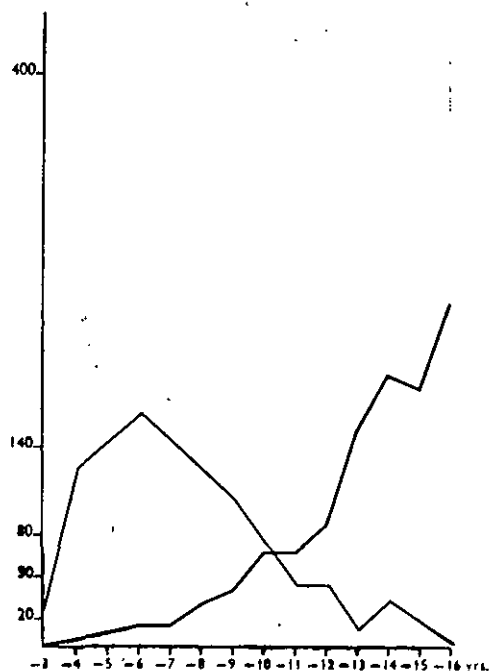
Pedestrian Risk —

DURING SCHOOL TERMS

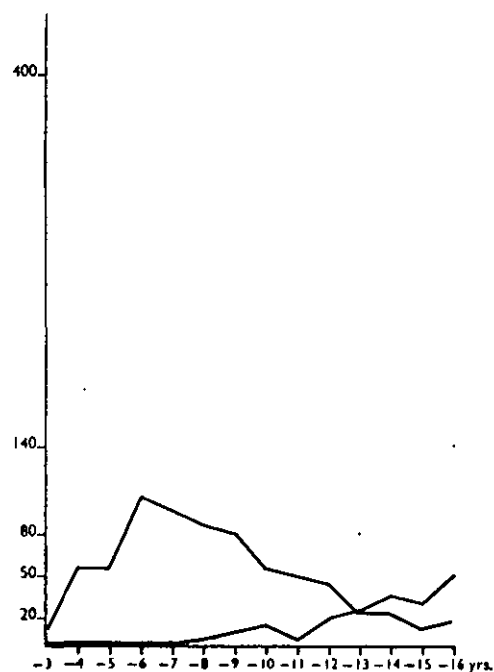
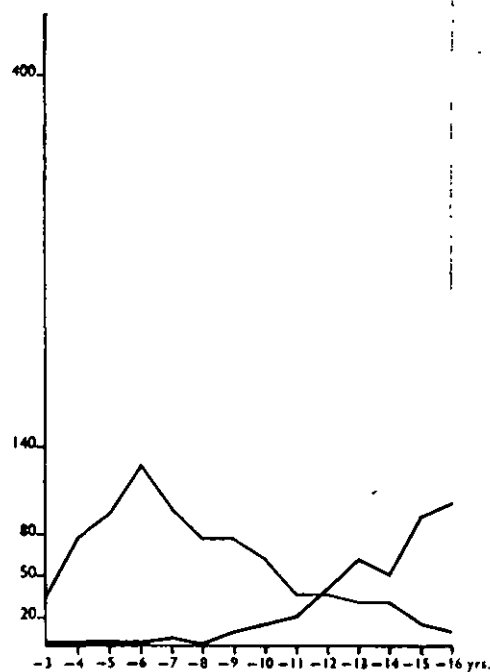
BOYS

JUNE

OCTOBER/NOVEMBER



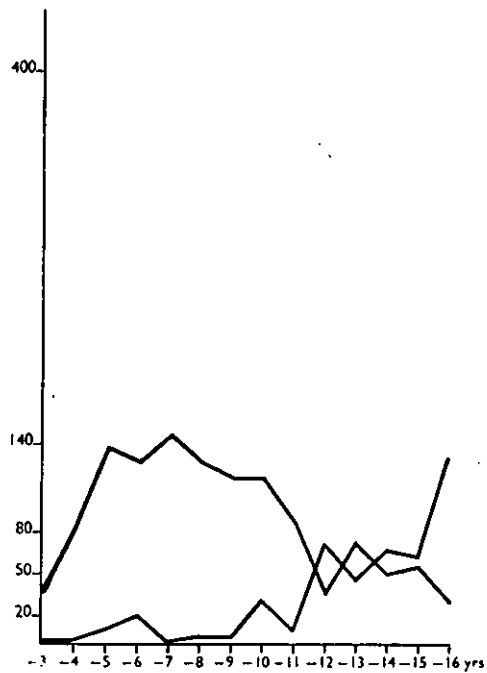
GIRLS



Cyclist Risk —

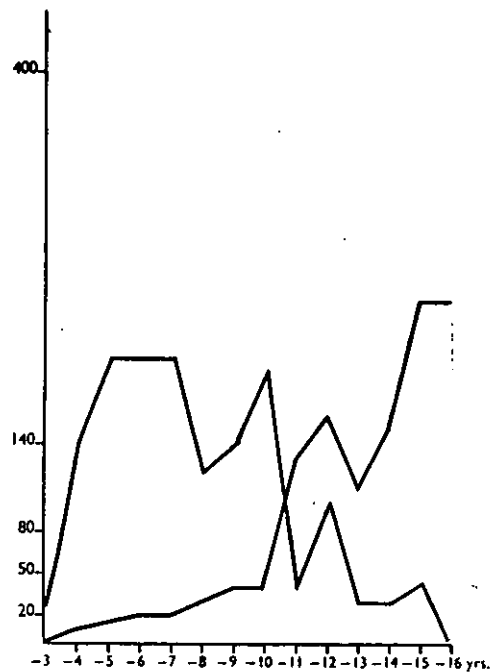
BOYS

FEBRUARY

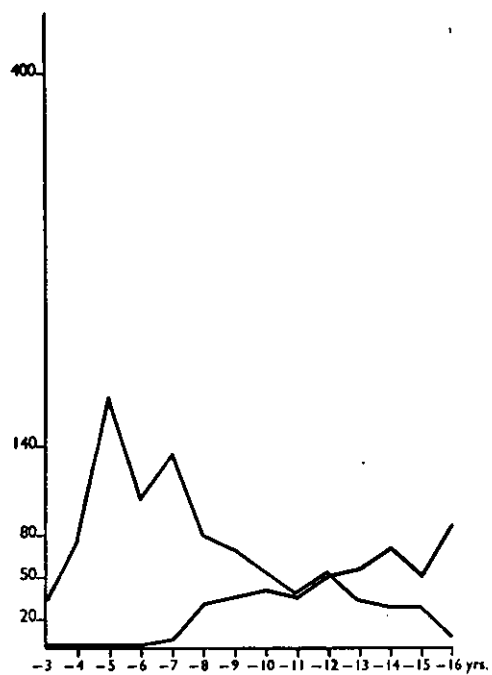
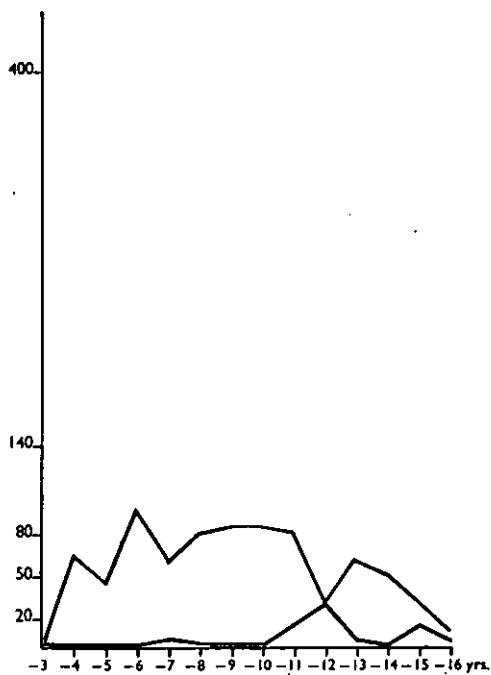


SATURDAYS DURING

MAY

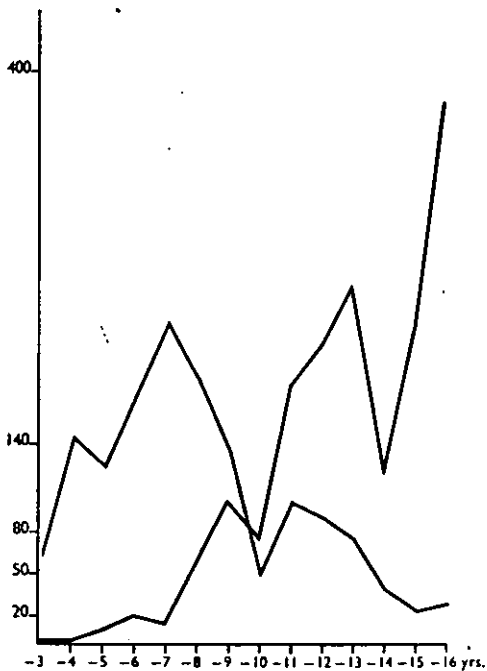


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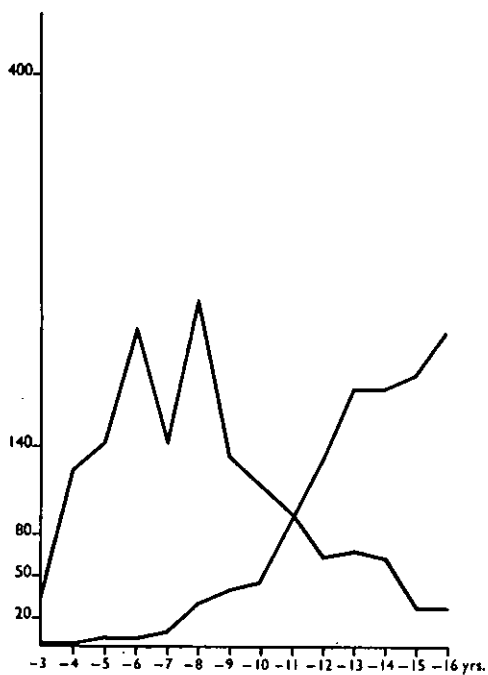


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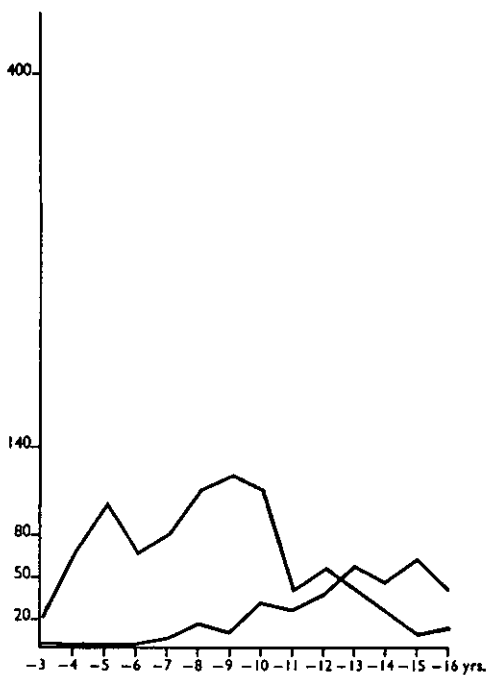
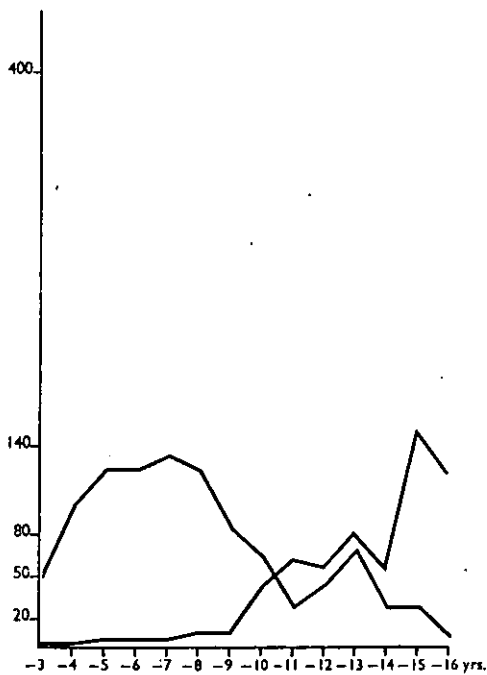
JUNE



OCTOBER/NOVEMBER



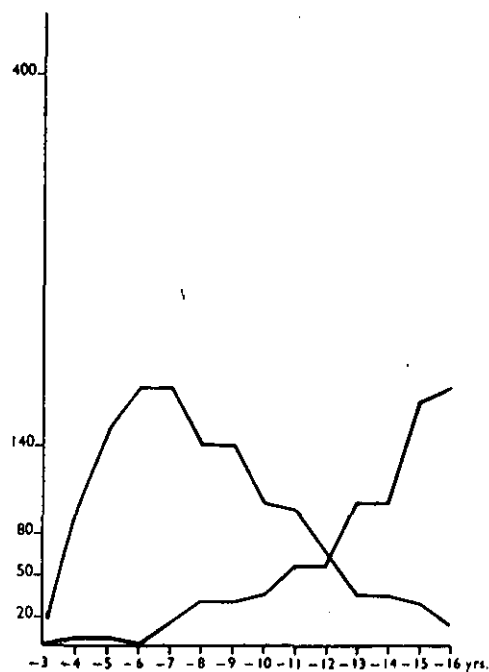
GIRLS



Cyclist Risk ———

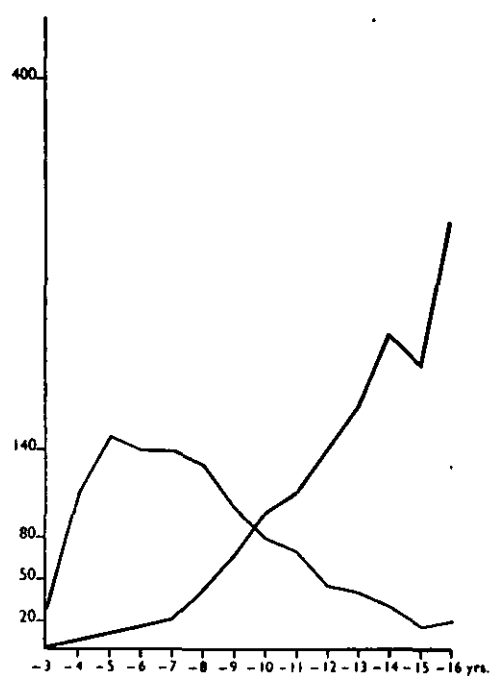
BOYS

EASTER

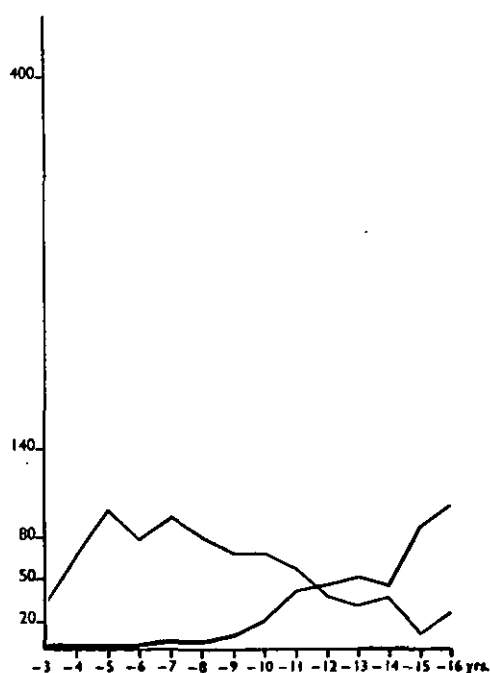
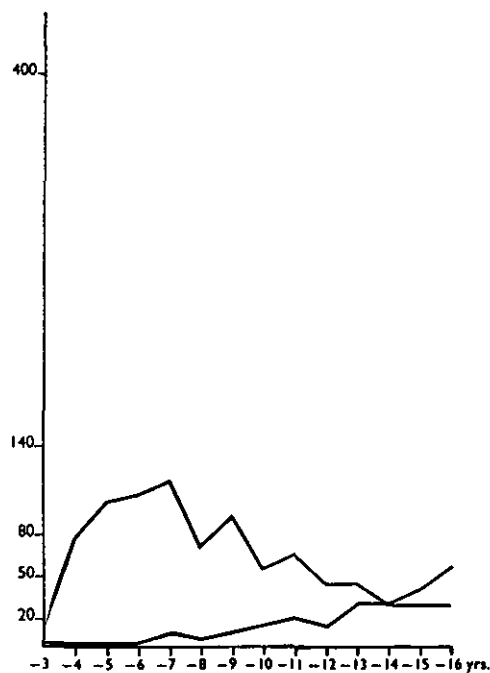


HOLIDAYS

AUGUST



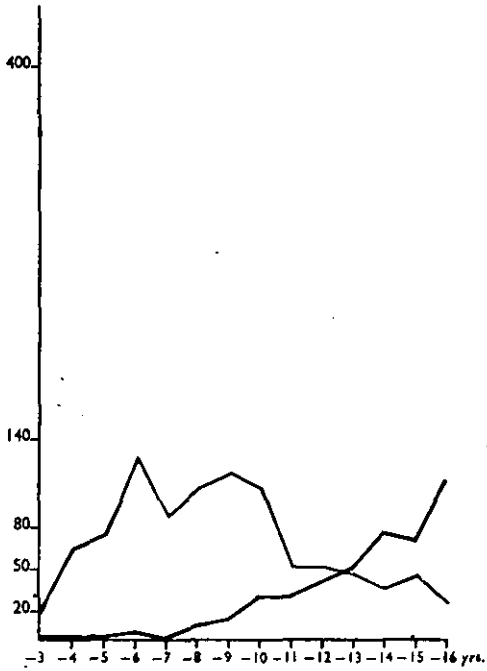
GIRLS



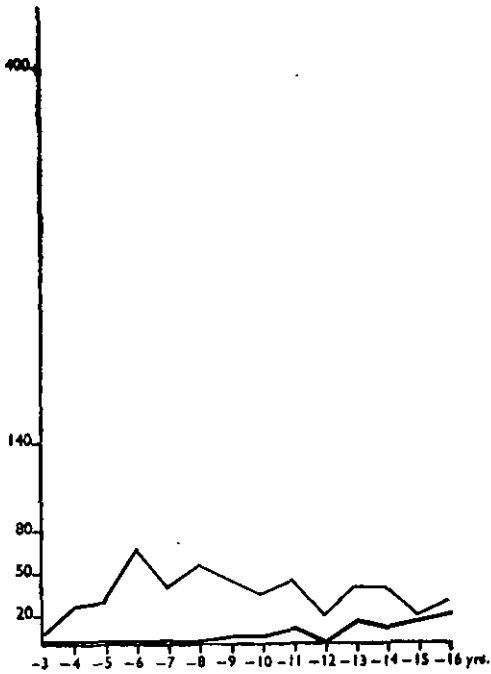
Pedestrian Risk —

BOYS

CHRISTMAS



GIRLS



Cyclist Risk ———

APPENDIX I

Statistics

Tables showing the risk at various times and as a result of various actions, by grouped ages, for boys and girls, separately.

INTRODUCTION

1. The figures in the following tables, as well as those quoted in the report, are derived directly from the body of information upon which the Ministry of Transport publication, "Road Accidents, 1951" (H.M.S.O. 1952, 3s. 6d.) was based. It arises from standard forms of report prepared by the Police Authorities throughout the country in respect of all road accidents resulting in injury which come to their knowledge. The standard forms are received by the Ministry of Transport and the information thereon is transferred to punched cards for ease of analysis. In 1951, there were 178,409 such accidents, involving the injury of 216,493 persons; 42,676 of these were children.

2. The inquiry upon which "The Child on The Road" is based covered all reported injuries in this group which occurred during periods at which it was almost certain that all school children were either at school or on holiday. There were periods in 1951 (January, parts of March and April, July, September, and parts of December) when no such certainty was possible. All injuries in these periods were excluded: all injuries other than those so excluded were studied and are included in the basic figures of the report.

3. The 30,000 cases were supplied to the Group through the courtesy of the Ministry of Transport and the active help of the Road Research Laboratory. They came in the form of 21 column tables as prepared by a Printing Tabulator from partially pre-sorted punched cards. No form of internal check (other than that carried out by the Road Research Laboratory) was possible in respect of the columns for age, sex, degree of seriousness of injury, month and hour of injury, since the pre-sorting had been in terms of these characteristics. The method of analysis adopted, however, did impose a strict test for internal consistency on the remaining columns, averaging about 12 per case overall. Discrepancies were thrown up in only one in 225 of the cases, affecting usually only one column. It was possible in nearly all cases to correct the discrepancy, except sometimes where it arose in the columns recording the prior action of the victim when recourse was had to "action unknown."

Since the analysis was carried out by only one person throughout, and that person was experienced in the study of road accidents and fully conversant with the form of record and the subsequent analytical methods, it is unlikely that the still hidden error in these columns is as large as that corrected for. It may therefore be said that the probable error in any one set of figures is of the order of 1 in 5,000 or less, on average. Totals were, of course, checked against tabulator count as a matter of routine.

4. Two processes of manipulation were then applied to the basic figures. The latter concerned varying numbers of days, ranging from 4 Saturdays in February, 1951 to 45 school-days in October and November, 1951. Further, the number of boys, and girls of a given age differed materially according to that age, ranging from 476,000 boys aged over 4 and under 5 at the date of the Census, to 315,000 boys aged 10 and under 11. As a first manipulation, therefore, all the actual figures were converted to a standard base of 10 million alive for one day's experience — or, which is the same thing, of 333,000 alive for 30 days experience. Put in the second way, the approximation to the actual results for one age/sex group for one month becomes apparent for the majority of age-groups. This manipulation required the use of a mechanical calculator, in the initial employment of which an error was made which distorted all the results to a varying degree. The thanks of the Group are due to the Road Research Laboratory for pointing out this error in time for the correct procedure to be substituted before tables were subjected to the next stage of manipulation. This acknowledgement should not carry with it the inference that the Road Research Laboratory are in any way responsible for the calculations made by the Group.

5. The figures resulting from the operation designed to make them inter-comparable emerged as two and three digit numbers. It was felt that to publish them as they stood would give an impression of exactitude which, while arithmetically justified, would be misleading in the full context. Various factors contribute to this. In the first

place, the age reported by the Police is probably approximate in many cases, though the error likely to arise is less in the case of children than for adults. Secondly, the population figure for each age-group which has been used is that given in the 1% Sample Census Report, based on a date in April. As 1951 progressed, there would inevitably be increases in the population at certain ages and decreases at others; no exact measure of this progression is possible, though some allowance for trend was made. Finally, the multipliers applied to various periods in order to achieve inter-comparability ranged from the fraction, one-tenth, to rather over seven (in the case of Saturdays and Sundays for some age-groups). It was therefore decided to round off the exact figures calculated to the nearest 5 below 100, and to the nearest 10 over 100, in the case of all single year risks. None of the orders of magnitude is affected, but the adjusted figures convey a better impression of the nicety of calibration. It was not felt necessary or desirable to do this when 4 or 5 ages were grouped.

6. It is necessary to emphasize that the "Risk-rates" quoted throughout this report refer to the actual occurrences recorded during the periods in 1951 which were studied. It has been suggested that the term "Risk-rate" carries with it the implication that the figures, in comparisons, have differences which are statistically significant, or otherwise, in the technical sense. A reading of the text of the report should dispose of this misapprehension as to intention; a little thought will raise considerable doubts on its practicability, philosophical reality, or relevance. In whatever direction one looks, one is faced with obvious lacks in homogeneity on the one hand, and equally obvious uncertainties on the exact dimensions of populations at risk at particular times, on the other.

The study is simply an analytical tabulation of reported experience. The device of the "Risk-rate" is expressly an arithmetic aid to avoid the danger of distortions arising from the differing lengths of the periods studied, and the differing numbers of children who could possibly be at risk being overlooked.

7. Little further comment is called for. It is important to bear in mind, as emphasized in the body of the Report, that the Cycling risk-rates assume all boys and girls at each age to possess and/or use a bicycle: this is obviously an unreal assumption, but data on the subject are not obtainable. It follows that some of the apparently lower pedestrian risks run by boys in the higher age-groups in the summer may be attributable to a lessened exposure to risk as pedestrians as a result of time spent cycling, but the differences here are slight, anyway.

8. The point is made in the report that the police seldom witness an accident as it happens; this may affect the reliability of reported prior actions. But, against this, it must be remembered that there are at least two proponents in an injury accident, the victim and the party inflicting the injury, and independent witnesses are usually reachable.

9. A very minor point concerns the risk at different times of the day. On examination, the number of accidents occurring during school-days which were reported as falling (a) between 8 a.m. and 9 a.m. and (b) between 9 a.m. and 10 a.m. fluctuated unpredictably between the periods examined and between age-groups. Since most accidents probably occurred closely on either side of 9 a.m. it was felt sounder to merge the two periods in presenting the analysis.

G. PRYS WILLIAMS

NOTE ON STATISTICAL ANALYSIS TABLES

Risk rates are calculated throughout to represent the risk of injury per 10 million per day in 1951 within each age-group. They are therefore always strictly comparable with one another.

In the tables which follow, these total daily risk-rates are analysed to show how they were made up, either according to the hours during which they occurred, or according to the actions reported to have preceded the accidents. The Thermometer device used in the body of the Report is not, therefore, applicable to the individual figures.

Whereas in the risk-rates tables (pages 30-33) the sequence observed is pedestrian, passenger, cyclist, that sequence is varied in the tables in the Statistical Appendix. The variation is for the practical purpose of bringing the major risks, pedestrian and cyclist, together and facilitating comparison.

RISKS AT DIFFERENT TIMES OF DAY

PEDESTRIANS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	1	2	5	1	3	2	1	2	—	—	—	—	—	—
May	—	1	4	7	4	2	5	7	7	4	2	2	1	—	—
June	—	3	11	7	5	2	5	7	5	9	6	5	5	1	—
Oct. and Nov.	—	1	5	7	4	7	9	6	4	3	1	—	—	1	—
On Mondays— Fridays :															
February	—	7	5	8	6	4	9	14	8	3	2	—	—	—	—
May	—	8	9	12	7	6	11	17	15	8	6	3	1	—	—
June	—	11	8	10	9	5	8	16	13	9	7	3	1	—	—
Oct. and Nov.	—	9	8	13	11	6	12	15	11	6	1	—	—	—	—
On Saturdays :															
February	—	5	7	17	7	9	7	14	3	1	1	1	—	—	—
May	—	12	15	17	12	12	11	8	14	2	2	1	—	—	—
June	—	13	12	12	19	7	11	7	7	4	8	4	2	—	—
Oct. and Nov.	—	12	15	19	11	10	9	12	7	2	1	—	—	—	—
During School Holidays :															
Easter	—	9	7	14	10	10	10	10	10	4	2	—	—	—	—
August	—	9	10	11	7	9	9	10	10	9	5	2	—	—	—
Christmas	—	3	5	8	5	5	8	7	4	2	1	1	—	1	—

CYCLISTS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Oct. and Nov.	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
On Mondays— Fridays :															
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—
June	—	1	1	1	—	—	—	—	1	1	1	—	—	—	—
Oct. and Nov.	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
On Saturdays :															
February	—	—	2	—	—	1	—	1	1	—	—	—	—	—	—
May	—	2	1	1	—	—	—	2	—	4	—	—	—	—	—
June	—	1	2	—	—	—	—	2	—	—	—	—	—	—	—
Oct. and Nov.	—	1	1	—	—	—	—	—	1	—	—	—	—	—	—
During School Holidays :															
Easter	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
August	—	2	—	1	—	—	1	1	—	—	—	—	—	—	—
Christmas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE A

UNDER 6—GIRLS

RISKS AT DIFFERENT TIMES OF DAY

PEDESTRIANS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	4	—	5	1	2	—	—	1	—	—	—	—
May	—	1	2	6	4	5	9	4	2	2	5	2	—	—	—
June	1	3	4	2	2	6	10	6	1	5	5	2	1	4	—
Oct. and Nov.	—	—	4	6	1	2	4	5	1	2	1	1	1	—	—
On Mondays— Fridays :															
February	—	5	2	6	4	3	6	4	4	1	1	—	—	—	—
May	—	5	6	6	3	3	5	8	9	6	6	1	—	—	—
June	—	7	6	8	7	4	7	11	8	7	3	2	1	—	—
Oct. and Nov.	—	5	4	6	4	4	7	7	6	3	1	—	—	—	—
On Saturdays :															
February	—	4	4	6	6	2	6	6	5	—	—	—	—	—	—
May	—	10	10	9	11	9	9	5	5	6	4	2	1	1	—
June	—	6	12	12	7	12	9	6	7	4	7	4	2	1	—
Oct. and Nov.	—	8	6	6	8	7	3	8	5	4	—	—	—	—	—
During School Holidays :															
Easter	—	6	5	7	7	7	7	6	8	3	2	—	—	—	—
August	—	4	6	7	5	4	6	7	7	6	3	1	—	—	—
Christmas	—	2	2	7	1	3	3	4	2	1	—	—	1	—	—

CYCLISTS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—
Oct. and Nov.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
On Mondays— Fridays :															
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
June	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Oct. and Nov.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
On Saturdays :															
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
June	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—
Oct. and Nov.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
During School Holidays :															
Easter	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
August	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Christmas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

BOYS—UNDER 6

TABLE A

RISKS AT DIFFERENT TIMES OF DAY (Continued)

PASSENGERS

WHEN	Before 8 a.m.	8 a.m. 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	1	—	—	1	2	5	—	—	1	—	—	—	1	—
May	—	3	1	2	2	4	9	—	5	5	9	1	—	—	—
June	—	7	3	2	2	1	6	3	2	3	1	5	2	1	—
Oct. and Nov.	—	1	6	1	1	2	2	2	2	2	2	1	—	1	—
On Mondays— Fridays :															
February	—	2	1	1	2	1	1	1	1	—	—	—	—	—	—
May	—	2	1	—	2	2	2	2	1	2	1	—	—	—	—
June	—	3	1	3	2	2	3	2	1	2	1	1	1	—	—
Oct. and Nov.	—	3	1	3	1	2	3	2	1	1	1	—	—	—	—
On Saturdays :															
February	1	6	—	—	—	5	—	3	—	2	—	—	2	1	—
May	—	6	4	—	6	1	2	7	4	—	6	—	—	—	—
June	1	5	1	7	1	5	7	2	1	2	3	3	1	2	—
Oct. and Nov.	1	4	3	3	4	2	3	3	2	1	1	1	2	—	—
During School Holidays															
Easter	—	2	2	2	2	2	2	4	1	1	—	—	—	—	—
August	1	4	2	2	4	2	4	3	3	3	2	1	1	1	—
Christmas	—	1	2	2	—	2	1	1	1	1	1	1	—	—	—

RISKS ACCORDING TO WHAT CHILD DOES

TABLE B

PASSENGERS

WHEN	Boarding, alighting, or falling off or in a Public Service Vehicle.	Boarding, alighting or falling, off or in all other types of Vehicles	Stealing a Ride	Sitting or standing as a passenger in a Vehicle	Details of injured person's action unknown
On Sundays :					
February	3	2	—	6	—
May	6	4	1	26	1
June	7	3	1	24	1
October and November	1	3	1	13	1
On Mondays—Fridays :					
February	5	—	1	4	1
May	5	—	2	9	—
June	5	2	2	7	—
October and November	5	2	2	8	—
On Saturdays :					
February	2	1	1	14	—
May	5	—	1	24	1
June	8	3	4	22	—
October and November	6	3	3	13	1
During School Holidays :					
Easter	4	3	2	9	—
August	5	2	1	20	1
Christmas	3	2	1	8	—

TABLE A

UNDER 6—GIRLS

RISKS AT DIFFERENT TIMES OF DAY (Continued)

PASSENGERS

WHEN	Before 8. a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	1	2	—	—	—	1	—	—	—	—	—
May	—	1	5	1	1	2	2	6	1	4	1	1	1	1	—
June	—	7	1	4	1	2	6	1	1	5	4	4	1	1	—
Oct. and Nov.	1	1	1	1	1	1	3	1	2	2	1	4	1	—	—
On Mondays—															
Fridays :															
February	—	1	1	—	—	—	2	1	—	—	—	—	—	—	—
May	—	1	—	2	1	2	2	2	2	—	—	—	1	—	—
June	—	2	2	2	—	2	3	2	1	1	1	—	1	—	—
Oct. and Nov.	—	2	1	1	1	2	2	1	1	1	1	—	—	—	—
On Saturdays :															
February	—	1	1	2	—	1	1	2	1	1	—	—	1	—	—
May	1	1	4	2	5	4	4	5	2	2	1	—	—	1	—
June	—	2	4	1	1	5	1	5	2	2	2	4	3	1	—
Oct. and Nov.	—	2	1	1	—	2	3	2	1	2	1	—	1	1	—
During School Holidays :															
Easter	—	3	2	1	1	1	2	1	1	1	—	—	—	—	—
August	1	3	3	2	2	2	2	2	1	2	1	1	—	—	—
Christmas	1	1	2	1	1	—	1	2	2	—	1	—	—	1	—

TABLE B

RISKS ACCORDING TO WHAT CHILD DOES

PASSENGERS

WHEN	Boarding, alighting or falling off or in a Public Service Vehicle	Boarding, alighting or falling off or in all other types of Vehicles	Stealing a Ride	Sitting or standing as a passenger in a Vehicle	Details of injured person's action unknown
On Sundays :					
February	1	1	1	1	—
May	7	5	—	15	—
June	—	1	—	31	4
October and November	2	—	—	14	1
On Mondays—Fridays :					
February	4	1	—	3	—
May	4	1	—	7	1
June	6	1	—	8	—
October and November	3	1	—	7	—
On Saturdays :					
February	—	2	—	10	—
May	5	—	—	26	—
June	5	2	—	23	—
October and November	4	1	1	9	—
During School Holidays :					
Easter	3	2	—	7	—
August	3	3	—	14	1
Christmas	2	1	—	8	1

RISKS ACCORDING TO WHAT CHILD DOES (Continued)

PEDESTRIANS

WHEN	Crossing the road from behind a vehicle.	Crossing the road, NOT masked by a vehicle.	Playing in the road.	Stepping, Walking or running off the pavement, footpath or verge.	Standing on the footpath or a refuge.	All other actions taken together.*
On Sundays :						
February	3	1	2	11	—	—
May	2	11	2	24	—	3
June	9	11	7	32	2	5
October & November	9	7	3	23	1	2
On Mondays—Fridays						
February	14	12	4	33	1	2
May	19	15	12	47	2	7
June	19	15	8	43	3	9
October & November	18	15	9	40	3	7
On Saturdays :						
February	12	14	9	32	1	3
May	26	17	12	44	2	3
June	15	20	11	47	3	8
October & November	20	19	7	43	3	6
During School Holidays:						
Easter	17	12	6	41	3	3
August	18	13	8	40	2	7
Christmas	9	7	2	21	2	5

* "All other actions" comprise walking in the road, standing in the road, holding on to a moving vehicle, working on a vehicle in the road, and unknown. None is important by comparison with main actions specified.

CYCLISTS

WHEN	Just going ahead, not overtaking or passing	Pulling out from near side or turning into and with traffic	Going ahead and overtaking	Making RIGHT turn	Making LEFT turn	All other actions taken together*
On Sundays :						
February	—	—	—	—	—	—
May	1	1	—	—	—	—
June	—	—	—	—	—	—
October and November	1	—	—	—	—	—
On Mondays—Fridays :						
February	1	—	—	—	—	—
May	2	1	—	—	—	—
June	3	1	—	1	—	1
October and November	1	—	—	—	—	—
On Saturdays :						
February	5	1	—	—	—	—
May	7	1	—	1	—	1
June	4	—	—	—	—	1
October and November	1	1	—	—	—	—
During School Holidays:						
Easter	1	1	—	—	—	—
August	3	1	—	—	—	—
Christmas	—	—	—	—	—	1

* "All other actions" comprise moving outward prior to overtaking, passing or turning, moving inward after overtaking, pulling out from offside of road, stopping, standing stationary, temporarily held up or parked, riding on or emerging from cycle track, wheel caught in tram tracks, towing or being towed, and unknown.

TABLE B

UNDER 6—GIRLS

RISKS ACCORDING TO WHAT CHILD DOES (Continued)

PEDESTRIANS

WHEN	Crossing the road from behind a vehicle	Crossing the road, NOT masked by a vehicle	Playing in the road	Stepping, walking or running off the pavement, footpath or verge	Standing on the footpath or a refuge	All other actions taken together*
On Sundays :						
February	1	2	—	8	—	1
May	9	6	4	19	2	—
June	11	9	2	17	5	4
October and November	7	4	2	12	1	—
On Mondays—Fridays						
February	7	7	2	15	—	—
May	12	10	5	22	2	2
June	14	15	6	25	2	4
October and November	9	9	4	22	1	3
On Saturdays :						
February	11	9	1	13	—	1
May	18	15	5	32	1	6
June	13	19	6	39	3	4
October and November	11	10	2	22	5	3
During School Holidays:						
Easter	10	9	5	27	1	1
August	10	11	3	24	1	4
Christmas	5	7	2	4	—	2

* "All other actions" comprise walking in the road, standing in the road, holding on to a moving vehicle, working on a vehicle in the road, and unknown. None is important by comparison with main actions specified.

CYCLISTS

WHEN	Just going ahead, not overtaking or Passing	Pulling out from the near side or turning into and with traffic	Going ahead and overtaking	Making RIGHT turn	Making LEFT turn	All other actions taken together*
On Sundays :						
February	—	—	—	—	—	—
May	1	—	—	—	—	—
June	1	—	—	—	—	1
October and November	—	—	—	—	—	—
On Mondays—Fridays :						
February	1	—	—	—	—	—
May	—	—	—	—	—	—
June	—	—	—	—	—	—
October and November	—	—	—	—	—	—
On Saturdays :						
February	—	—	—	—	—	—
May	—	—	—	—	—	—
June	2	—	—	—	—	—
October and November	—	—	—	—	—	—
During School Holidays:						
Easter	—	—	—	—	—	—
August	—	—	—	—	—	—
Christmas	—	—	—	—	—	—

* "All other actions" comprise moving outward prior to overtaking, passing or turning, moving inward after overtaking, pulling out from offside of road, stopping, standing stationary, temporarily held up or parked, riding on or emerging from cycle track, wheel caught in tram tracks, towing or being towed, and unknown.

RISKS AT DIFFERENT TIMES OF DAY

PEDESTRIANS

WHEN	Before 8. am.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10p.m.
On Sundays :															
February	—	1	1	5	—	—	10	5	4	3	1	1	—	—	—
May	—	3	1	10	5	4	9	3	10	—	4	4	1	—	—
June	—	5	8	6	5	6	6	5	11	11	3	3	1	—	—
Oct. and Nov.	—	2	4	9	6	7	10	6	6	3	2	1	1	1	—
On Mondays— Fridays :															
February	—	14	2	18	14	2	17	38	18	13	4	1	—	—	—
May	—	15	4	19	11	6	15	26	23	15	10	6	1	—	—
June	—	17	1	14	10	2	11	27	19	13	9	5	1	—	—
Oct. and Nov.	—	16	2	24	14	4	15	39	26	13	7	1	—	—	—
On Saturdays :															
February	—	15	9	16	13	21	4	21	14	3	—	3	1	—	—
May	—	6	16	27	22	22	18	16	14	9	5	11	1	—	—
June	—	18	18	25	15	17	11	11	14	7	7	4	1	—	—
Oct. and Nov.	—	24	19	28	17	12	21	23	13	6	4	1	1	—	—
During School Holidays :															
Easter	—	13	13	19	16	11	25	18	19	6	5	2	—	—	—
August	—	13	13	14	7	10	11	13	16	11	5	3	2	—	—
Christmas	—	10	9	14	11	6	13	14	11	5	3	2	—	—	—

CYCLISTS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10p.m.
On Sundays :															
February	—	—	—	1	1	—	1	1	—	—	—	—	—	—	—
May	—	—	3	6	4	—	—	5	1	3	3	1	—	—	—
June	—	6	1	9	3	3	5	1	1	4	3	1	1	—	—
Oct. and Nov.	—	1	3	2	1	3	3	4	—	—	—	—	—	—	—
On Mondays— Fridays :															
February	—	—	—	1	1	—	1	3	1	1	—	—	—	—	—
May	—	2	2	2	1	—	2	6	5	4	3	2	1	—	—
June	—	2	—	2	1	1	1	4	4	7	4	3	—	—	—
Oct. and Nov.	—	2	1	2	1	1	1	4	2	1	—	—	—	—	—
On Saturdays :															
February	—	1	6	—	—	—	—	4	—	—	—	—	—	—	—
May	—	7	—	3	1	1	1	6	1	4	3	—	—	—	—
June	2	11	5	5	9	2	2	5	4	2	3	—	—	—	—
Oct. and Nov.	—	4	3	4	1	3	3	5	3	1	—	—	—	—	—
During School Holidays :															
Easter	—	4	1	2	2	1	2	3	1	2	—	—	—	—	—
August	—	6	4	5	3	4	4	3	6	3	2	1	—	—	—
Christmas	—	2	1	1	—	1	3	1	1	—	—	—	—	—	—

RISKS AT DIFFERENT TIMES OF DAY

PEDESTRIANS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	1	4	1	5	3	—	—	—	—	—	—	—	—
May	—	3	4	4	5	7	13	8	5	4	5	—	—	—	—
June	—	4	4	1	1	9	7	5	4	4	9	3	—	1	—
Oct. and Nov.	—	—	2	5	1	6	7	5	—	3	1	—	1	—	—
On Mondays— Fridays :															
February	—	11	2	10	7	2	7	15	10	7	3	1	—	—	—
May	—	12	2	10	6	3	9	16	16	11	6	4	1	—	—
June	—	11	1	12	7	3	6	12	13	7	7	5	1	—	—
Oct. and Nov.	—	14	1	13	9	2	11	21	11	3	3	1	—	—	—
On Saturdays :															
February	1	4	13	18	5	4	4	9	7	3	1	3	—	1	—
May	—	16	9	9	14	10	—	4	9	4	3	4	1	1	—
June	—	7	5	16	5	7	15	12	6	6	7	7	2	—	—
Oct. and Nov.	—	9	12	22	7	10	4	12	5	5	3	1	1	1	—
During School Holidays :															
Easter	—	11	5	11	9	9	10	6	10	6	3	1	—	—	—
August	—	6	6	6	5	5	6	7	9	6	6	3	1	1	—
Christmas	—	4	3	6	2	2	8	9	7	2	—	—	1	—	—

CYCLISTS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	4	1	3	3	—	—	—	—	—	—	—	—
June	—	1	—	1	3	—	3	—	1	1	—	—	—	—	—
Oct. and Nov.	—	1	—	—	—	1	1	1	—	1	—	—	—	—	—
On Mondays— Fridays :															
February	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
May	—	1	—	1	1	—	1	1	2	1	1	—	—	—	—
June	—	—	—	—	—	—	—	1	—	1	1	—	—	—	—
Oct. and Nov.	—	1	—	1	—	—	—	1	1	—	—	—	—	—	—
On Saturdays :															
February	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
May	—	3	—	1	3	—	—	7	3	1	1	1	—	—	—
June	—	2	1	3	1	2	—	1	2	—	—	—	—	—	—
Oct. and Nov.	—	2	2	3	1	—	1	2	—	—	—	—	—	—	—
During School Holidays :															
Easter	—	1	—	—	—	2	1	—	1	—	—	—	—	—	—
August	—	1	1	1	1	—	1	—	1	—	1	—	—	—	—
Christmas	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—

RISKS AT DIFFERENT TIMES OF DAY (Continued)

PASSENGERS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	—	3	—	3	—	—	1	—	3	—	—
May	—	2	4	1	1	3	6	5	3	4	9	3	—	—	—
June	—	5	1	4	1	1	3	4	3	5	4	4	1	5	—
Oct. and Nov.	—	1	3	2	—	3	6	1	1	2	1	1	—	2	—
On Mondays— Fridays :															
February	—	2	—	2	2	1	3	4	2	—	1	—	—	—	—
May	—	2	—	2	2	2	3	3	2	2	2	1	—	—	—
June	—	5	—	3	1	—	2	3	1	1	1	1	—	—	—
Oct. and Nov.	—	3	1	2	2	1	3	4	2	1	—	1	—	—	—
On Saturdays :															
February	1	1	3	1	—	3	1	5	—	1	—	1	1	—	—
May	1	9	2	1	1	3	1	10	3	—	5	1	—	—	—
June	—	9	3	4	2	6	—	1	—	5	2	1	—	—	—
Oct. and Nov.	—	4	4	2	4	3	4	4	2	—	3	1	—	1	—
During School Holidays :															
Easter	—	3	3	2	2	2	3	5	2	2	—	—	—	—	—
August	1	3	4	3	3	2	4	3	2	2	2	2	1	1	—
Christmas	1	3	3	3	3	2	1	2	1	—	1	—	—	1	—

RISKS ACCORDING TO WHAT CHILD DOES

PASSENGERS

WHEN	Boarding, alighting, or falling off or in a Public Service Vehicle	Boarding, alighting, or falling off or in all other types of vehicles	Stealing a ride	Sitting or standing as a passenger in a vehicle	Details of injured person's action unknown
On Sundays :					
February	3	—	—	6	—
May	8	5	—	27	1
June	7	3	1	30	1
October and November	4	3	1	12	2
On Mondays—Fridays :					
February	9	2	2	5	—
May	7	2	3	10	—
June	12	1	2	6	—
October and November	9	2	4	6	—
On Saturdays :					
February	2	1	1	17	—
May	4	—	4	30	—
June	9	4	1	19	1
October and November	9	4	3	17	1
During School Holidays:					
Easter	6	2	4	14	—
August	6	3	2	25	—
Christmas	5	2	2	12	1

TABLE A

5-10-GIRLS

RISKS AT DIFFERENT TIMES OF DAY

PASSENGERS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	3	1	1	—	4	1	—	—	—	1	—
May	—	1	1	4	—	4	1	1	5	1	1	1	1	—	—
June	—	1	1	1	3	1	1	1	1	3	3	3	—	—	—
Oct. and Nov.	—	1	1	1	1	—	1	1	1	2	1	1	1	1	—
On Mondays—															
Fridays :															
February	—	4	—	1	—	1	2	2	2	1	—	—	1	—	—
May	—	2	—	2	1	—	1	2	2	1	1	—	—	—	—
June	—	2	—	3	—	—	3	2	1	—	1	—	1	—	—
Oct. and Nov.	—	2	—	1	1	—	2	2	1	—	—	—	—	—	—
On Saturdays :															
February	—	1	—	—	—	—	3	1	—	3	—	1	3	1	—
May	—	1	7	4	—	4	1	—	3	3	1	—	—	1	—
June	—	7	5	1	3	5	5	—	—	2	—	7	1	3	—
Oct. and Nov.	—	2	1	1	1	3	1	1	3	1	2	—	1	3	—
During School															
Holidays :															
Easter	—	3	1	1	2	1	3	4	2	1	—	—	—	—	—
August	1	4	3	2	2	2	3	2	2	2	1	2	—	1	—
Christmas	—	2	1	—	2	—	2	1	2	2	1	—	—	1	—

TABLE B

RISKS ACCORDING TO WHAT CHILD DOES

PASSENGERS

WHEN	Boarding, alighting, or falling off or in a Public Service Vehicle	Boarding, alighting, or falling off or in all other types of Vehicles	Stealing a Ride	Sitting or standing as a passenger in a Vehicle	Details of injured person's action unknown
On Sundays :					
February	4	1	1	5	—
May	10	—	—	16	—
June	3	—	—	17	1
October and November	1	1	—	7	1
On Mondays—Fridays :					
February	6	—	—	5	—
May	5	1	1	7	1
June	7	1	—	6	1
October and November	5	1	—	5	—
On Saturdays :					
February	3	3	—	9	—
May	4	—	—	23	—
June	13	1	—	31	—
October and November	7	1	—	14	—
During School Holidays :					
Easter	6	2	—	13	—
August	4	2	1	19	1
Christmas	2	1	—	11	1

RISKS ACCORDING TO WHAT CHILD DOES (Continued)

PEDESTRIANS

WHEN	Crossing the road from behind a vehicle	Crossing the road, NOT masked by a vehicle	Playing in the road	Standing, walking or running off the pavement, footpath or verge	Standing on the footpath or a refuge	All other actions taken together*
On Sundays :						
February	19	5	1	18	—	—
May	5	11	3	29	3	2
June	24	9	3	30	4	3
October and November	10	15	6	25	1	3
On Mondays—Fridays:						
February	33	29	7	68	2	5
May	33	33	9	71	2	5
June	29	29	9	55	1	6
October and November	37	33	10	73	3	6
On Saturdays :						
February	36	25	10	45	3	1
May	70	14	16	62	—	5
June	36	30	4	72	2	3
October and November	51	38	12	63	1	4
During School Holidays:						
Easter	36	28	9	70	2	4
August	30	23	7	50	2	4
Christmas	25	26	3	39	1	4

* "All other actions" comprise walking in the road, standing in the road, holding on to a moving vehicle, working on a vehicle in the road, and unknown. None is important by comparison with main actions specified.

CYCLISTS

WHEN	Just going ahead, not overtaking or passing	Pulling out from the near side or turning into and with traffic	Going ahead and overtaking	Making RIGHT turn	Making LEFT turn	All other actions taken together*
On Sundays :						
February	1	1	—	3	—	—
May	15	5	1	5	—	—
June	16	4	3	9	4	1
October and November	7	4	1	2	1	2
On Mondays—Fridays						
February	4	2	—	2	1	—
May	13	4	2	7	1	3
June	14	4	2	6	1	1
October and November	6	2	1	3	1	1
On Saturdays :						
February	6	1	—	1	—	3
May	15	2	—	5	4	2
June	25	8	2	11	1	3
October and November	7	3	2	10	—	3
During School Holidays						
Easter	11	3	1	5	1	—
August	21	5	2	10	2	2
Christmas	5	1	—	2	1	1

* "All other actions" comprise moving outward prior to overtaking, passing or turning; moving inward after overtaking, pulling out from offside of road, stopping, standing stationary, temporarily held up or parked, riding on or emerging from cycle track, wheel caught in tram tracks, towing or being towed, and unknown.

RISKS ACCORDING TO WHAT CHILD DOES (Continued)

PEDESTRIANS

WHEN	Crossing the road from behind a Vehicle	Crossing the road, NOT masked by a Vehicle	Playing in the road	Stepping, Walking, or running off the pavement footpath or verge	Standing on the footpath or a refuge	All other actions taken together*
On Sundays :						
February	4	3	1	7	—	—
May	17	9	3	31	1	—
June	5	9	3	31	5	2
October and November	6	7	2	17	1	1
On Mondays—Fridays :						
February	19	19	1	36	1	1
May	24	21	4	42	3	4
June	27	19	4	32	2	2
October and November	26	18	1	38	2	2
On Saturdays :						
February	26	14	1	25	7	1
May	23	21	1	29	4	5
June	30	24	2	41	3	3
October and November	25	27	2	31	4	4
During School Holidays:						
Easter	21	21	6	31	1	—
August	19	13	3	29	2	4
Christmas	13	14	1	15	1	3

* "All other actions" comprise walking in the road, standing in the road, holding on to a moving vehicle, working on a vehicle in the road, and unknown. None is important by comparison with main actions specified.

CYCLISTS

WHEN	Just going ahead, not overtaking or passing	Pulling out from the near side or turning into and with traffic	Going ahead and overtaking	Making RIGHT turn	Making LEFT turn	All other actions taken together*
On Sundays :						
February	1	—	—	—	—	—
May	3	1	—	4	1	—
June	5	—	3	1	—	1
October and November	1	1	—	1	—	1
On Mondays—Fridays :						
February	1	—	—	—	—	—
May	3	1	—	2	1	—
June	2	1	—	1	—	—
October and November	1	1	—	1	—	—
On Saturdays :						
February	1	—	—	—	—	—
May	7	3	1	7	—	2
June	7	2	—	1	1	1
October and November	3	1	1	2	1	4
During School Holidays:						
Easter	4	1	—	—	—	—
August	4	1	1	—	—	—
Christmas	—	—	—	—	—	—

* "All other actions" comprise moving outward prior to overtaking, passing or turning, moving inward after overtaking, pulling out from offside of road, stopping, standing stationary, temporarily held up or parked, riding on or emerging from cycle track, wheel caught in tram tracks, towing or being towed, and unknown.

RISKS AT DIFFERENT TIMES OF DAY

PEDESTRIANS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	2	2	2	—	—	4	—	—	8	2	2	—	—	—
May	—	4	—	—	—	—	2	2	—	—	2	4	—	—	—
June	2	6	—	4	2	4	4	—	4	—	4	6	2	—	—
Oct. and Nov.	—	—	3	4	3	5	2	4	2	—	1	2	1	—	—
On Mondays— Fridays :															
February	—	6	—	6	5	1	3	15	6	7	3	4	—	—	—
May	—	7	1	4	5	1	3	7	11	6	3	4	2	1	—
June	—	1	—	1	1	—	—	1	2	1	1	1	1	—	—
Oct. and Nov.	—	7	1	6	5	1	3	17	12	6	5	2	1	—	—
On Saturdays :															
February	—	6	6	9	9	8	2	6	15	6	2	—	2	—	—
May	—	2	9	19	4	8	13	11	8	4	2	9	—	—	—
June	1	13	4	13	3	6	9	7	—	4	3	3	3	—	—
Oct. and Nov.	—	11	8	11	7	8	6	11	9	5	4	—	—	—	—
During School Holidays :															
Easter	1	6	6	8	8	5	7	8	8	6	3	2	1	—	—
August	—	8	4	7	5	4	6	5	8	3	2	3	1	1	—
Christmas	—	7	3	7	5	4	4	4	9	3	4	2	2	1	—

CYCLISTS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	6	6	—	2	4	—	—	4	2	—	—	—	—
May	—	2	4	11	4	13	4	11	6	4	4	4	2	2	—
June	—	12	6	15	8	15	19	12	10	12	10	10	4	—	—
Oct. and Nov.	—	3	6	3	4	5	12	12	2	1	1	1	1	—	—
On Mondays— Fridays :															
February	—	6	1	4	2	1	1	3	11	3	1	1	—	—	—
May	1	11	3	9	5	2	4	14	12	9	8	4	—	—	—
June	—	8	1	10	3	1	3	17	13	10	12	8	3	—	—
Oct. and Nov.	1	10	2	7	7	1	2	14	8	3	2	—	—	—	—
On Saturdays :															
February	—	6	6	6	—	6	6	2	2	6	—	—	—	—	—
May	—	17	6	9	13	13	11	13	8	9	2	6	—	—	—
June	1	28	15	17	18	24	13	10	12	10	9	10	6	—	—
Oct. and Nov.	1	21	13	11	15	9	12	11	7	3	1	2	—	—	—
During School Holidays :															
Easter	1	10	6	8	5	6	5	8	5	3	1	1	—	1	—
August	—	18	10	10	9	12	10	13	14	9	7	7	3	—	—
Christmas	—	6	5	6	2	7	5	3	1	—	—	—	—	—	—

TABLE A

9-13—GIRLS

RISKS AT DIFFERENT TIMES OF DAY

PEDESTRIANS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	2	—	2	4	2	—	—	—	—	2	—	—	—	—
May	—	—	2	2	2	6	—	—	—	—	—	—	—	2	—
June	—	4	4	—	—	4	4	2	4	6	6	6	—	—	—
Oct. and Nov.	—	—	1	2	1	3	4	2	1	1	—	—	—	—	—
On Mondays—															
Fridays :															
February	—	6	—	3	5	1	2	7	7	6	2	—	—	1	—
May	—	8	—	2	4	2	1	2	8	4	6	3	3	1	—
June	—	6	1	3	2	1	1	7	7	5	4	4	1	—	—
Oct. and Nov.	—	8	2	4	3	1	1	13	7	3	2	2	—	—	—
On Saturdays :															
February	—	4	4	12	14	8	—	4	2	4	4	—	—	—	—
May	—	8	2	10	—	2	2	4	2	4	4	—	2	—	—
June	—	2	5	11	2	5	3	3	2	6	3	5	2	—	—
Oct. and Nov.	—	5	8	13	4	6	7	6	6	1	4	—	—	—	—
During School															
Holidays :															
Easter	—	3	3	5	5	4	4	6	5	4	2	1	—	1	—
August	—	6	4	3	3	3	5	4	5	2	3	—	2	—	—
Christmas	—	4	2	4	4	2	3	6	2	3	3	1	1	—	—

CYCLISTS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	2	—	—	2	—	—	—	—	—	—	—
May	—	—	4	2	2	2	4	6	2	4	2	2	—	—	—
June	—	2	—	2	—	2	4	2	8	6	4	2	—	—	—
Oct. and Nov.	—	1	2	2	1	1	1	1	—	1	—	—	—	—	—
On Mondays—															
Fridays :															
February	—	2	—	1	—	1	1	1	1	1	—	—	—	—	—
May	1	4	1	2	1	1	1	6	5	3	4	2	—	—	—
June	—	4	1	1	1	—	1	5	6	4	3	4	1	—	—
Oct. and Nov.	—	4	—	2	2	—	—	4	2	1	1	—	—	—	—
On Saturdays :															
February	—	—	2	—	2	—	6	4	—	—	—	—	—	—	—
May	—	8	2	6	6	—	4	4	4	6	6	—	—	—	—
June	—	12	8	11	5	6	5	2	5	—	3	2	—	—	—
Oct. and Nov.	—	7	5	8	2	5	3	2	2	2	—	—	—	—	—
During School															
Holidays :															
Easter	—	2	2	1	2	2	2	3	3	—	—	—	—	—	—
August	—	8	4	3	3	2	3	3	3	3	4	1	1	—	—
Christmas	—	3	1	1	1	1	1	1	1	—	—	—	—	—	—

RISKS AT DIFFERENT TIMES OF DAY (Continued)

PASSENGERS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	2	—	4	2	2	2	—	—	—	—	—	—	—
May	—	2	4	2	4	2	—	6	2	2	—	—	—	—	—
June	—	6	—	—	—	—	—	9	8	—	—	6	4	2	—
Oct. and Nov.	—	5	1	3	—	4	2	1	1	3	—	—	—	1	—
On Mondays— Fridays :															
February	—	3	1	—	1	1	1	5	1	—	1	—	—	—	—
May	—	2	1	2	2	1	1	3	—	1	1	1	1	1	—
June	—	1	—	1	1	—	—	1	2	1	1	1	1	—	—
Oct. and Nov.	—	6	—	1	1	1	2	3	2	1	1	—	—	—	—
On Saturdays :															
February	—	—	4	—	—	—	2	6	2	4	—	—	2	—	—
May	—	6	2	2	8	6	—	4	—	—	2	2	—	2	—
June	1	5	3	1	1	3	1	1	1	1	1	1	—	—	—
Oct. and Nov.	—	4	4	3	3	4	4	2	2	3	—	—	2	2	—
During School Holidays :															
Easter	1	3	3	2	1	4	2	4	2	1	1	—	1	—	—
August	1	7	3	2	3	2	2	3	3	3	2	2	1	1	—
Christmas	—	3	3	2	3	1	1	3	—	1	1	1	—	1	—

RISKS ACCORDING TO WHAT CHILD DOES

TABLE B

PASSENGERS

WHEN	Boarding, alighting, or falling off or in a Public Service Vehicle	Boarding, alighting, or falling off or in all other types of Vehicles	Stealing a Ride	Sitting or standing as a passenger in a Vehicle	Details of injured person's action unknown
On Sundays :					
February	2	2	—	7	—
May	8	—	—	15	2
June	4	—	4	26	—
October and November	4	1	2	13	—
On Mondays—Fridays :					
February	5	1	1	9	—
May	5	2	1	9	—
June	5	—	2	3	—
October and November	6	2	3	7	—
On Saturdays :					
February	9	—	—	9	—
May	9	—	6	17	—
June	9	—	—	13	3
October and November	5	3	5	18	1
During School Holidays:					
Easter	4	1	3	15	1
August	5	3	2	23	1
Christmas	5	2	2	9	—

TABLE A

9-13—GIRLS

RISKS AT DIFFERENT TIMES OF DAY (Continued)

PASSENGERS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	—	—	—	—	4	—	—	—	—	2	—
May	—	4	—	4	—	—	4	4	2	2	4	—	—	2	—
June	—	—	2	2	4	2	2	2	4	—	—	—	2	4	—
Oct. and Nov.	—	1	—	2	—	3	4	—	2	1	2	—	—	2	—
On Mondays— Fridays :															
February	—	3	—	—	—	—	—	2	—	2	—	—	—	—	—
May	—	4	—	—	1	1	1	3	1	1	1	1	—	—	—
June	—	2	1	1	1	—	—	3	1	1	2	1	1	—	—
Oct. and Nov.	—	3	1	1	1	—	1	2	1	1	—	—	—	—	—
On Saturdays :															
February	4	2	—	2	—	—	—	2	—	2	—	—	—	4	—
May	—	4	10	4	—	2	4	—	2	—	—	2	2	4	—
June	2	5	2	3	2	3	3	2	—	2	2	9	—	—	—
Oct. and Nov.	—	1	1	—	1	4	2	1	—	2	3	—	1	3	—
During School Holidays :															
Easter	—	1	2	2	3	2	1	1	3	—	1	—	—	—	—
August	—	3	3	2	2	3	4	2	1	3	3	2	—	2	—
Christmas	—	2	1	—	—	1	2	1	2	1	1	1	—	—	—

TABLE B

RISKS ACCORDING TO WHAT CHILD DOES

PASSENGERS

WHEN	Boarding, alighting, or falling off or in a Public Service Vehicle	Boarding, alighting, or falling off or in all other types of Vehicles	Stealing a Ride	Sitting or standing as a passenger in a Vehicle	Details of injured person's action unknown
On Sundays :					
February	2	—	—	4	—
May	6	—	—	18	2
June	—	2	—	20	2
October and November	4	1	1	11	—
On Mondays—Fridays :					
February	2	—	—	6	—
May	6	1	—	5	1
June	7	1	—	4	—
October and November	5	1	—	3	—
On Saturdays :					
February	8	—	—	8	—
May	10	—	—	24	—
June	3	5	—	23	2
October and November	6	—	—	10	3
During School Holidays:					
Easter	5	2	1	11	—
August	5	1	—	20	1
Christmas	3	1	1	6	1

RISKS ACCORDING TO WHAT CHILD DOES (Continued)

PEDESTRIANS

WHEN	Crossing the road from behind a Vehicle	Crossing the road, NOT masked by a Vehicle	Playing in the road	Stepping, Walking or running off the, pavement footpath or verge	Standing on the footpath on a refuge	All other actions taken together*
On Sundays :						
February	4	6	—	11	—	2
May	—	2	—	9	2	—
June	2	9	—	17	2	6
October and November	5	8	2	7	4	1
On Mondays—Fridays :						
February	10	16	4	23	2	3
May	13	12	4	19	3	3
June	10	14	5	15	1	3
October and November	13	14	3	29	1	3
On Saturdays :						
February	19	24	2	17	2	6
May	25	9	9	41	—	4
June	21	18	6	21	3	3
October and November	14	21	4	24	7	9
During School Holidays:						
Easter	18	14	5	26	1	5
August	14	11	2	22	3	5
Christmas	14	14	2	19	4	4

* "All other actions" comprise walking in the road, standing in the road, holding on to a moving vehicle, working on a vehicle in the road, and unknown. None is important by comparison with main actions specified.

CYCLISTS

WHEN	Just going ahead, not overtaking or passing	Pulling out from the near side or turning into and with traffic	Going ahead and overtaking	Making RIGHT turn	Making LEFT turn	All other actions taken together*
On Sundays :						
February	19	4	—	—	—	—
May	53	2	4	4	4	4
June	71	11	8	21	8	9
October and November	80	4	9	9	—	10
On Mondays—Fridays:						
February	12	3	4	6	3	1
May	49	7	7	20	3	5
June	46	7	10	15	4	6
October and November	88	5	15	18	3	12
On Saturdays :						
February	20	—	4	8	—	6
May	49	9	13	25	4	10
June	95	10	21	32	9	9
October and November	51	4	11	25	2	15
During School Holidays:						
Easter	36	3	2	11	5	3
August	63	10	11	27	6	7
Christmas	17	2	2	7	2	5

* "All other actions" comprise moving outward prior to overtaking, passing or turning, moving inward after overtaking, pulling out from offside of road, stopping, standing stationary, temporarily held up or parked, riding on or emerging from cycle track, wheel caught in tram tracks, towing or being towed, and unknown.

RISKS ACCORDING TO WHAT CHILD DOES (Continued)

PEDESTRIANS

WHEN	Crossing the road from behind a Vehicle	Crossing the road, NOT masked by a Vehicle	Playing in the road	Stepping, walking or running off the pavement, footpath or verge	Standing on the footpath or a refuge	All other actions taken together*
On Sundays :						
February	2	2	—	4	2	2
May	2	4	—	6	2	—
June	2	12	—	20	2	4
October and November	1	4	—	9	1	—
On Mondays—Fridays :						
February	9	12	2	16	2	2
May	11	10	2	16	4	1
June	14	10	1	13	3	3
October and November	13	12	2	16	2	1
On Saturdays :						
February	24	14	4	12	—	2
May	10	10	—	14	4	2
June	19	8	—	12	8	—
October and November	13	18	3	23	2	1
During School Holidays:						
Easter	13	10	2	14	3	—
August	10	10	1	13	3	4
Christmas	11	7	1	12	2	2

* "All other actions" comprise walking in the road, standing in the road, holding on to a moving vehicle, working on a vehicle in the road, and unknown. None is important by comparison with main actions specified.

CYCLISTS

WHEN	Just going ahead, not overtaking or passing	Pulling out from the near side or turning into and with traffic	Going ahead and overtaking	Making RIGHT turn	Making LEFT turn	All other actions taken together*
On Sundays :						
February	2	—	—	2	—	—
May	18	—	—	6	2	6
June	12	—	2	14	4	—
October and November	6	—	—	2	—	1
On Mondays—Fridays :						
February	4	—	2	2	—	—
May	15	2	3	9	3	—
June	18	1	2	9	—	1
October and November	7	2	2	3	1	2
On Saturdays :						
February	10	—	—	2	2	—
May	16	2	4	20	—	2
June	22	12	8	9	—	7
October and November	10	2	3	11	2	8
During School Holidays:						
Easter	8	1	1	6	—	2
August	17	3	4	9	2	1
Christmas	3	2	1	1	1	2

* "All other actions" comprise moving outward prior to overtaking, passing or turning, moving inward after overtaking, pulling out from offside of road, stopping, standing stationary, temporarily held up or parked, riding on or emerging from cycle track, wheel caught in tram tracks, towing or being towed, and unknown.

RISKS AT DIFFERENT TIMES OF DAY

PEDESTRIANS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	2	—	—	4	2	—	2	2	—	2	—	—
May	—	—	—	—	—	2	—	—	—	—	—	2	—	2	—
June	—	4	—	2	—	6	4	—	—	—	—	4	4	2	—
Oct. and Nov.	1	2	1	1	1	—	1	1	2	—	1	2	1	—	—
On Mondays—															
Fridays :															
February	—	3	—	3	2	1	2	6	6	3	2	1	—	—	—
May	—	3	1	1	3	1	1	3	5	2	3	1	3	—	—
June	—	5	1	1	1	1	1	4	2	2	1	1	1	—	—
Oct. and Nov.	1	4	1	3	2	1	2	6	6	2	2	2	—	1	—
On Saturdays :															
February	—	6	4	4	11	—	2	6	4	4	4	—	—	4	—
May	—	4	2	8	—	2	—	—	4	—	2	—	—	6	—
June	1	3	3	6	1	6	1	7	1	—	1	4	—	—	—
Oct. and Nov.	1	5	—	4	5	6	3	5	6	4	3	—	2	2	—
During School															
Holidays :															
Easter	—	6	1	2	2	2	1	3	5	2	1	1	2	1	—
August	—	4	4	2	1	1	2	3	4	2	1	2	1	—	—
Christmas	1	5	1	3	3	1	3	4	4	2	4	1	1	—	—

CYCLISTS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	2	6	6	—	6	8	—	4	9	6	—	—	2	—
May	—	14	6	11	13	19	15	19	8	9	8	11	4	6	—
June	6	25	23	15	23	25	25	38	25	25	26	30	12	19	—
Oct. and Nov.	—	9	14	8	15	10	9	18	13	4	4	3	4	3	—
On Mondays—															
Fridays :															
February	—	13	2	7	7	3	2	15	10	4	6	4	—	—	—
May	4	22	6	11	13	7	6	24	20	11	13	9	7	3	—
June	4	23	3	21	9	3	4	28	23	22	19	16	11	3	—
Oct. and Nov.	5	25	2	15	12	4	4	23	24	12	9	4	4	1	—
On Saturdays :															
February	4	15	8	8	13	9	8	6	4	2	—	—	—	—	—
May	—	34	11	8	19	30	28	15	9	8	6	11	2	—	—
June	1	33	21	33	29	16	19	22	13	18	13	9	10	1	—
Oct. and Nov.	7	41	20	16	20	17	22	22	8	8	6	2	2	1	—
During School															
Holidays															
Easter	3	20	9	14	12	14	12	17	16	5	5	4	1	2	—
August	3	29	19	21	15	17	17	19	21	14	14	14	9	3	—
Christmas	2	10	6	10	7	5	10	7	6	7	2	2	1	1	—

RISKS AT DIFFERENT TIMES OF DAY

PEDESTRIANS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	4	—	2	2	2	—	—	—	—	—	—	—
May	—	—	—	2	—	2	4	—	—	—	—	2	—	6	—
June	—	—	2	2	2	2	2	—	2	2	4	—	—	—	—
Oct. and Nov.	—	—	1	—	1	2	3	3	—	—	2	—	1	2	—
On Mondays—															
Fridays :															
February	—	3	—	1	1	—	1	3	5	3	3	—	1	3	—
May	—	7	—	2	2	1	2	3	3	3	2	2	—	—	—
June	—	5	—	1	3	—	1	5	3	3	1	3	2	—	—
Oct. and Nov.	1	3	1	2	2	—	—	6	5	3	1	1	1	1	—
On Saturdays :															
February	2	6	4	4	8	2	—	2	2	—	2	—	—	—	—
May	—	—	2	4	2	—	2	6	—	—	2	—	—	4	—
June	—	—	3	5	2	7	—	2	2	5	2	2	2	—	—
Oct. and Nov.	—	3	2	2	2	2	2	3	1	4	3	—	—	—	—
During School															
Holidays :															
Easter	—	4	3	2	2	2	4	4	3	1	1	1	1	2	—
August	—	4	1	1	2	2	1	1	2	3	2	1	2	1	—
Christmas	—	3	1	4	3	2	2	3	3	4	2	1	2	2	—

CYCLISTS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	2	4	4	2	2	4	8	2	2	12	10	—	—	—
June	—	12	2	2	—	12	10	16	4	14	18	10	4	2	—
Oct. and Nov.	—	2	1	3	1	1	1	4	4	—	—	—	1	—	—
On Mondays—															
Fridays :															
February	—	3	—	3	2	2	1	3	3	1	—	—	—	1	—
May	2	7	2	4	6	2	3	7	9	5	7	3	2	2	—
June	1	14	1	2	5	—	3	11	9	9	7	7	4	1	—
Oct. and Nov.	1	8	1	4	3	1	1	7	5	3	1	1	1	—	—
On Saturdays :															
February	—	—	2	2	2	2	—	—	—	—	—	—	—	—	—
May	—	10	6	6	8	12	4	6	4	6	—	—	4	—	—
June	—	11	11	9	12	9	12	16	3	6	3	2	5	2	—
Oct. and Nov.	—	7	8	13	2	3	6	4	4	—	2	—	—	2	—
During School															
Holidays :															
Easter	—	5	2	4	1	3	4	5	4	1	1	—	—	1	—
August	2	9	6	6	5	5	5	6	8	4	5	5	1	1	—
Christmas	—	3	2	1	1	2	1	2	2	1	1	—	—	—	—

RISKS AT DIFFERENT TIMES OF DAY (Continued)

PASSENGERS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	2	—	2	—	—	2	—	6	—	2	—	2	2	—	—
May	—	2	2	2	6	4	—	4	4	4	4	2	—	2	—
June	—	2	2	—	—	2	2	2	2	—	—	4	8	2	—
Oct. and Nov.	1	4	1	2	2	3	1	1	3	—	3	1	1	—	—
On Mondays— Fridays :															
February	—	5	1	2	2	—	—	3	—	—	1	—	—	—	—
May	—	3	2	—	9	1	2	3	1	1	1	1	1	3	—
June	—	2	1	2	2	—	1	2	1	2	—	1	1	1	—
Oct. and Nov.	—	6	1	4	1	1	1	3	1	1	1	—	1	1	—
On Saturdays :															
February	6	—	2	2	—	2	2	2	—	—	2	—	—	—	—
May	—	2	6	4	4	4	2	2	2	—	—	2	2	4	—
June	3	4	—	—	4	4	1	1	1	—	—	—	—	—	—
Oct. and Nov.	2	7	3	2	3	4	2	2	5	2	1	1	3	3	—
During School Holidays :															
Easter	1	3	3	2	1	1	4	4	1	2	—	—	1	1	—
August	1	4	2	1	2	3	2	2	2	3	3	2	1	1	—
Christmas	1	3	2	1	4	1	2	4	1	1	2	—	1	2	—

RISKS ACCORDING TO WHAT CHILD DOES

PASSENGERS

WHEN	Boarding, alighting, or falling off or in a Public Service Vehicle	Boarding, alighting, or falling off or in all other types of Vehicle	Stealing a Ride	Sitting or standing as a passenger in a Vehicle	Details of injured person's action unknown
On Sundays :					
February	—	2	—	15	—
May	—	—	—	25	2
June	—	—	—	19	4
October and November	2	1	2	16	1
On Mondays—Fridays :					
February	5	2	1	8	1
May	11	2	1	13	1
June	4	1	1	9	1
October and November	5	2	1	12	1
On Saturdays :					
February	2	8	2	6	—
May	4	—	4	23	2
June	3	1	1	15	—
October and November	4	3	3	24	4
During School Holidays :					
Easter	3	2	1	15	3
August	4	3	1	22	3
Christmas	4	1	2	16	—

TABLE A

12-16—GIRLS

RISKS AT DIFFERENT TIMES OF DAY (Continued)

PASSENGERS

WHEN	Before 8 a.m.	8 a.m. / 10 a.m.	10 / 11	11 / Noon	Noon / 1	1 / 2	2 / 3	3 / 4	4 / 5	5 / 6	6 / 7	7 / 8	8 / 9	9 / 10	After 10 p.m.
On Sundays :															
February	—	—	—	—	—	—	2	2	—	—	—	2	—	—	—
May	—	2	—	—	2	2	—	4	2	—	2	4	—	4	—
June	—	—	4	4	2	2	2	—	2	—	2	8	2	2	—
Oct. and Nov.	—	—	—	1	—	1	4	—	2	—	1	2	2	—	—
On Mondays— Fridays :															
February	1	4	1	1	2	—	1	5	1	—	—	—	—	—	—
May	1	4	1	—	—	—	1	2	1	1	2	—	1	1	—
June	—	1	—	—	1	—	—	3	1	—	1	1	—	—	—
Oct. and Nov.	1	3	2	—	1	—	1	1	3	1	—	1	1	—	—
On Saturdays :															
February	—	6	—	2	—	—	4	2	—	—	—	—	—	2	—
May	—	2	4	—	—	—	4	2	4	2	—	—	2	4	—
June	—	2	3	2	2	3	2	3	2	—	—	3	2	—	—
Oct. and Nov.	—	—	1	1	—	2	1	—	—	3	2	—	1	1	—
During School Holidays :															
Easter	1	2	—	—	1	3	2	3	3	1	1	1	—	—	—
August	1	4	3	1	2	3	2	2	2	2	2	2	1	2	—
Christmas	—	2	2	1	1	1	2	2	1	—	1	—	—	3	—

TABLE B

RISKS ACCORDING TO WHAT CHILD DOES

PASSENGERS

WHEN	Boarding, alighting or falling off or in a Public Service Vehicle	Boarding, alighting or falling off or in all other types of Vehicles	Stealing a Ride	Sitting or standing as a passenger in a Vehicle	Details of injured person's action unknown
On Sundays :					
February	4	—	—	2	—
May	6	—	—	14	2
June	2	—	—	26	2
October and November	3	—	—	10	—
On Mondays—Fridays :					
February	6	1	—	8	—
May	5	—	—	8	—
June	6	—	—	3	1
October and November	6	1	—	6	—
On Saturdays :					
February	6	—	—	10	—
May	6	—	—	18	—
June	5	2	—	16	—
October and November	3	—	—	6	3
During School Holidays:					
Easter	7	1	1	10	1
August	4	1	—	18	2
Christmas	3	1	—	10	1

RISKS ACCORDING TO WHAT CHILD DOES (Continued)

PEDESTRIANS

WHEN	Crossing the road from behind a Vehicle	Crossing the road, NOT masked by a Vehicle	Playing in the road	Stepping, Walking, or running off the pavement footpath or verge	Standing on the footpath or a refuge	All other actions taken together*
On Sundays :						
February	—	6	—	—	—	8
May	—	—	—	4	—	2
June	4	2	—	8	2	10
October and November	2	3	—	6	1	2
On Mondays—Fridays :						
February	5	6	2	10	2	5
May	4	6	3	9	2	2
June	5	5	1	6	2	2
October and November	5	7	1	13	2	3
On Saturdays :						
February	13	13	4	6	4	8
May	2	6	—	11	—	8
June	12	9	1	9	3	2
October and November	10	7	2	9	4	11
During School Holidays:						
Easter	8	5	3	8	1	2
August	6	3	1	9	1	5
Christmas	5	8	2	10	1	6

* "All other actions" comprise walking in the road, standing in the road, holding on to a moving vehicle, working on a vehicle in the road, and unknown. None is important by comparison with main actions specified.

CYCLISTS

WHEN	Just going ahead, not overtaking or passing	Pulling out from the near side or turning into and with traffic	Going ahead and overtaking	Making RIGHT turn	Making LEFT turn	All other actions taken together*
On Sundays :						
February	38	4	1	—	2	2
May	102	6	6	17	4	8
June	194	13	43	30	8	28
October and November	80	4	9	9	—	10
On Mondays—Fridays :						
February	51	3	8	11	2	4
May	90	11	24	17	6	8
June	116	8	21	21	18	14
October and November	88	5	15	18	3	12
On Saturdays :						
February	36	4	13	9	6	8
May	109	11	21	28	4	10
June	156	9	26	26	15	11
October and November	109	14	15	32	2	16
During School Holidays:						
Easter	88	6	12	19	4	6
August	138	11	20	28	7	10
Christmas	43	4	7	12	2	9

* "All other actions" comprise moving outward prior to overtaking, passing or turning, moving inward after overtaking, pulling out from offside of road, stopping, standing stationary, temporarily held up or parked, riding on or emerging from cycle track, wheel caught in tram tracks, towing or being towed, and unknown.

TABLE B

12-16—GIRLS

RISKS ACCORDING TO WHAT CHILD DOES (Continued)

PEDESTRIANS

WHEN	Crossing the road from behind a Vehicle	Crossing the road, NOT masked by a Vehicle	Playing in the road	Stepping walking, or running off the pavement, footpath or verge	Standing on the footpath or a refuge	All other actions taken together*
On Sundays :						
February	6	2	—	2	—	—
May	6	4	—	4	2	—
June	4	8	—	2	—	4
October and November	1	6	—	5	—	3
On Mondays—Fridays :						
February	5	8	1	7	2	4
May	7	7	—	10	2	2
June	5	5	2	7	4	2
October and November	6	8	—	8	1	2
On Saturdays :						
February	8	10	—	6	4	4
May	6	4	—	2	4	6
June	16	3	—	5	6	—
October and November	6	5	—	6	4	3
During School Holidays:						
Easter	8	6	—	8	4	1
August	7	7	1	4	1	2
Christmas	8	10	1	8	2	4

* "All other actions" comprise walking in the road, standing in the road, holding on to a moving vehicle, working on a vehicle in the road, and unknown. None is important by comparison with main actions specified.

CYCLISTS

WHEN	Just going ahead, not overtaking or passing	Pulling out from the near side or turning into and with traffic	Going ahead and overtaking	Making RIGHT turn	Making LEFT turn	Details of actions taken together*
On Sundays :						
February	—	—	—	—	—	—
May	28	—	4	14	2	2
June	74	—	4	16	10	2
October and November	12	1	—	3	1	1
On Mondays—Fridays:						
February	12	—	3	3	—	—
May	35	2	6	6	2	4
June	45	4	7	10	1	6
October and November	21	2	5	5	1	1
On Saturdays :						
February	6	—	—	2	—	—
May	50	—	2	10	—	2
June	51	8	11	19	3	11
October and November	24	2	7	8	3	7
During School Holidays:						
Easter	16	1	4	5	1	—
August	37	2	8	14	3	4
Christmas	6	—	3	4	1	1

* "All other actions" comprise moving outward prior to overtaking, passing or turning, moving inward after overtaking, pulling out from offside of road, stopping, standing stationary, temporarily held up or parked, riding on or emerging from cycle track, wheel caught in tram tracks, towing or being towed, and unknown.

APPENDIX II

Recommendations of previous reports and action taken

It has been said, in Parliament and elsewhere, that recommendations made by the various official committees on road safety, have, for the most part, been pigeon-holed and forgotten.

Detailed examination of the facts does not support this allegation. As we shall see, it is true that proposals which involve substantial spending of money, materials and man-power, have usually been treated in a way that leaves room for criticism. It is to be remembered, however, that pre-war suggestions were made in a context of surplus man-power and plenty of materials, whereas for the last fourteen years there has been a serious shortage of both. Successive Governments — Coalition, Labour and Conservative — have all been in difficulties when drawing up programmes of capital expenditure.

On the other hand it is certainly true that many important recommendations have been acted upon with impressive skill and persistence.

In commenting here on suggestions made and what came of them, it will be convenient to deal with special care with the report, published in 1936, of the Interdepartmental Committee of the Board of Education and the Ministry of Transport, since this Committee was specifically concerned with Road Safety Among School Children.

When the report was published, the Board of Education called the attention of local education authorities to it in Circular 1449 of April 24, 1936, and at the same time the Home Office and the Ministry of Transport issued circulars to Chief Constables and Highway Authorities respectively about certain of its recommendations. In October 1941, after a serious increase in the number of road accidents to school children in war-time conditions, the Board of Education issued Circular 1570 in which local education

authorities were reminded of the recommendations of the 1936 Report and asked to give a brief statement of the measures they were taking in the matter.

Other specific suggestions made in this report are set forth below with a note on what happened in respect of each of them.

(1) **Parents should be made aware of their responsibility. They should not allow children "under about the age of seven" to be on the highway unaccompanied. Teachers should tackle parents when children are first brought to school, and also on Open Days, etc.**

There should be a Road Safety Code for Parents (Draft code included in Report).

In July, 1943, the Royal Society for the Prevention of Accidents (R.S.P.A.) issued a bulletin called "Education Authorities and Road Safety amongst Children in War-time" compiled by the Board of Education, the Scottish Education Department, and the Society. It includes the following paragraphs :—

"The responsibility of making children road-safety conscious does not rest upon education authorities and teachers alone. The main responsibility rests on parents, and education authorities seek their co-operation either by joint meetings, Parents' Days, or by messages sent through the children.

"Many education authorities have already issued a Parent Safety Code as recommended by the Inter-departmental Committees on Road Safety among School Children. It will be remembered that it was advised that this Code should be issued locally with the advantage of local facts, statistics and advice.

"In order to enlist their co-operation, authorities invite parents to safety lectures and films; address parents on Parents' Days on safety, and suggest that when

parents bring their children to school, the opportunity should be taken by teachers to give them practical advice. Special leaflets are occasionally issued, e.g., with special reference to the summer holidays, asking parents to keep their children off the roads and in public play-grounds where special play leaders had been provided. One education authority is seeking the aid of its Youth Committee organisation to induce parents' co-operation."

R.S.P.A. also issued a Road-Safety Code for children.

(2) **Children's Safety Committees** should be set up under local authorities. Board of Education and Ministry of Transport should take initiative in consultation with Home Office. A Central Committee should promote national propaganda and report annually.

Children's Safety Committees were the subject of a follow up Circular from the Board of Education to local education authorities in 1937. Returns were asked for showing whether Committees had been, or were being, set up. Many of these Committees apparently lapsed at the beginning of the war, and in October, 1941 the Board asked L.E.A.'s to give immediate consideration to the desirability of reviving them, or establishing them where they did not exist. N.B. The Interim Report of the Committee on Road Safety (1944) amplified this proposal. It recommended that local authorities should set up local safety organisations including representatives of the Highway and Education Authorities, the Police, and all other interested bodies in the locality. Existing Child Safety Committees, it was suggested, should continue to function as part of the local organisation. The work of Child Safety Committees has probably therefore tended to be merged into these more general committees.

(3) **School curriculum** should include road-safety training. This should include Highway Code, playground games, footpath or pavement training. It should be graduated from

games at the infant stage to the treatment of older children as cyclists of today and motorists of tomorrow.

Apart from the initial Circulars issued by the Board of Education at the time of the publication of the Report, the Board and Ministry have several times reminded Local Education Authorities and schools of their responsibility. The policy of the Department is normally to refrain from attempting to interfere with the responsibility of teachers and L.E.A.'s for the school curriculum, but in a circular issued in October, 1941, they went so far as to say, "the Board strongly urge, therefore, that renewed and increased road-safety training should be included in the curriculum of all schools." Similarly a few days later, the Minister urged L.E.A.'s and schools to review the position and "take such steps as may appear necessary to ensure that in schools of all types adequate and suitable training and instruction in road safety principles is regularly given."

The response proved that the teaching of road safety in schools was practically universal.

(4) **School exits** opening on busy thoroughfares should be closed. If alternative exits cannot be made, guard rails or barriers should be erected. Bus and tram stops should not be near school exits.

This matter was immediately brought to the attention of local education authorities. In April, 1936 the Board of Education offered grants to authorities which incurred expenditure on providing guard rails. These have been widely installed.

The importance of safe access is borne in mind in planning the large number of new schools which are being built. The Ministry of Education's Bulletin No. 1, says, "although it is well known that sites adjacent to main traffic routes are unsuitable for schools, the importance of safe access to the school cannot be over-emphasised."

Careful attention is paid to this aspect of plans when they are being discussed with L.E.A.'s.

Thus far, action taken in response to the Report has been completely loyal to the letter and spirit of the recommendations, and the enthusiastic co-operation of all concerned — Ministry of Education, Local Education Authorities, Safety Committees and Safety Officers, Police, school teachers and school caretakers — has been rewarded by reduced toll on youthful lives and well-being.

The value of all this educational work is very great, for training today's children is also training the coming generation of adult citizens.

Other suggestions have run into greater difficulties, often because they depend at least as much on the parents as on the schools, and parents are far more difficult to educate than children. For instance :—

(5) **Child Cyclists.** *Parents must be urged to make sure that their children are competent cyclists and know the Highway Code. A test for cyclists should be considered. In schools the responsibilities of cyclists should be taught in post-primary stage. A Code of Rules should be drawn up for pupils who cycle to school. (Draft Code included in Report.)*

A good deal of work has been done in this way. R.S.P.A. inaugurated in 1949 the Cycling Safety League which is being adopted by an increasing number of schools, and also a cycling proficiency test. The test is usually conducted by the local road-safety committee. Although the tests are not conducted by the schools, they are usually held in school playgrounds which have been placed by the local education authority at the disposal of the road safety committee. Many L.E.A.'s have their own schemes to encourage safe cycling. In London, for instance, children are not allowed to bring cycles to school unless they are enrolled in the school cyclists' club and have passed a test in knowledge of the Highway Code and ability to use a cycle safely.

And yet accidents to young cyclists remain a most formidable unsolved problem. The best that can be done through the schools organisation is clearly nothing like enough.

Other good suggestions were obviously easier to make than to carry out. For instance :—

(6) **Playing Fields,** *suitably equipped and with trained play leaders, and smaller playing places near the homes of young children, should be considered. Play Streets are a possible alternative.*

Some work has been done in this way, but development at present is handicapped by financial limitations, especially on capital expenditure. The Report of the Central Advisory Council, "Out of School," is relevant, but it has not been possible so far to do much to carry out its recommendations. Some local authorities have special play streets closed to traffic in heavily built-up areas.

The heartening claims made on behalf of experiments with play-streets in Salford seem not in fact to have been fully supported by later experience.

(7) **Pedestrian Crossings.** *Islands should be provided wherever practicable. There should be police protection at all school crossings at times of assembly and dispersal. Authorised adult patrols, equipped with official sign, are an (inferior) alternative. The task should not be a duty imposed upon teachers and caretakers.*

Police protection is given whenever possible at school crossings where traffic is heavy. For many years now it has been restricted because the police have been undermanned. The Board of Education authorised L.E.A.'s to incur expenditure upon adult patrols in 1936, but only half the authorities did so because they held that it was a Police responsibility. The whole question has recently been thoroughly reviewed by the ministers concerned, and provision is now made for the training of adult patrols and wide extension of their use.

Under the Ministry of Transport Circular of June 20, 1951, the number of pedestrian crossings had to be drastically reduced, and they were not allowed to be retained for the special advantage of a "school, hospital, or similar institution where pedestrians cross

in numbers at intermittent and specific times only."

The Minister of Transport's view is that adult patrols outside schools at times of assembly and dispersal provide better protection than pedestrian crossings. The value of Police responsibility for recruiting and training has been demonstrated in the London metropolitan area. Details are being worked out locally.

Finally, among the more miscellaneous suggestions, the following may be mentioned.

(8) **School Signs.** *A conspicuous school sign, giving emphatic warning at relevant times, should be devised.*

This matter is still much discussed, but an acceptable plan has not yet emerged. The L.C.C. reported as follows in 1946 :—

"Before the war it was agreed that the Education Officer should be authorised to select and negotiate with a Metropolitan Borough Council with a view to co-operation in the experimental employment of the "flashing torch sign" on the basis that the Council would contribute a sum not exceeding £1,000 towards the initial cost of signs for the experiment in the Borough concerned for a period of one year. The experiment was not carried out in London, and it is understood that in other districts the experiment of using such signs met with little success. It is

not proposed that the experiment should be proceeded with at the present."

(9) **Propaganda Films** *are good, but classroom displays are more effective than displays to massed gatherings of school children.*

A great deal of teaching material has been produced by R.S.P.A. and other bodies. This was commended by the Ministry of Education to local education authorities in Administrative Memorandum No. 343 of November 15, 1949. Many films, Government and other, have been produced on road safety.

(10) **Broadcasting of talks on road-safety matters should be considered by the B.B.C. for schools programmes.**

Talks and other programmes on road safety are included at intervals in school broadcast programmes in such series as "Living in the Country" and "Current Affairs," and also in Children's Hour.

Television is doing more (out of school hours).

(11) **School Hours** *might be altered to avoid use of roads by children at hours when roads are congested with workers.*

It seems unlikely that this would generally be necessary or practicable, or of any value even if it were adopted.

It is to be noted that one result of the vast increase in school-meal facilities is that many children are now kept off the streets at mid-day.

House of Lords Committee (1938); Ministry of Transport Committee (1947)

The House of Lords Committee was set up in 1938. Apart from the circumstance that it endorsed the proposals of the Report already reviewed, it was not specially concerned with accidents to children, and it may therefore be disposed of here more briefly.

Several of its major suggestions were acted upon.

(a) A plea for a Propaganda Department resulted in the emergence of the Royal Society for the Prevention of Accidents,

which, however, receives only a small contribution to its costs from the Government;

(b) The suggestion for a road-safety research organisation resulted in the creation of the Road Research Board, as an advisory body of the Department of Scientific and Industrial Research. In 1946, the Government reconstituted the Road Research Board and extended its activities to include road safety. Its function is to act as an advisory committee for the Road Research Labor-

atory. It holds monthly meetings and works largely through committees composed partly of Board members, and partly of outside experts upon the scientific problems falling within the scope of such committees. The Board itself consists of members invited by the Government, representatives of certain outside organisations (such as the Medical Research Council) and assessors from other Government departments such as the Ministry of Transport. Research is carried on at or by the Road Research Laboratory, which employs a highly skilled scientific staff for the purpose;

(c) a further proposal for research into problems of dazzle and other matters of vehicle lighting has become a matter of intensive and continuous study by the Road Research Laboratory.

Secondary suggestions that have been carried out were

(d) that the Highway Code should contain a warning against even moderate use of alcohol by drivers;

(e) that pedestrian crossings should be controlled by lights; the onus of proving negligence resting upon any injured pedestrian who crosses the street near but not at a crossing;

(f) that islands should, where possible, be used at pedestrian crossings (but illumination of such crossings at night is not yet customary);

(g) that guard rails should be more freely used.

Other suggestions which deserve more attention than they have yet received were :—

(h) that driving tests should be more searching, and that the licensing authority should have power to investigate the physical fitness of the applicant;

(i) that a proficiency badge from a local authority should be required of a cyclist before he is permitted to use public roads;

(j) that old people should receive suitable warnings periodically with their pension payments;

(k) that pedestrian carelessness should be an offence;

(l) that traffic lights should not be shielded so that pedestrians cannot see them;

(m) that second-hand vehicles should be subject to a certificate of road-worthiness, and brake-testing should be instituted;

(n) that street names should be uniform and legible;

(o) that slow-moving lorries should be obliged to allow space between them for the safety of over-taking cars.

Both the pre-war House of Lords Committee, and the Post-war Ministry of Transport Committee on Road Safety had emphatic things to say about the need for road-engineering work on a big scale.

The House of Lords Committee held that a list showing priority of road-construction and improvement schemes should be kept, and that victims of accidents should have right of action against road authorities for failure to execute necessary road repairs.

The Ministry of Transport Committee also wants bad and inadequate roads to be tackled vigorously, and principles of traffic segregation to be kept in mind by town and country planners. Its other recommendations included the following :—

(a) that propaganda for road safety should be persistent, continuous and localised: (but in fact funds for national propaganda were withdrawn from Ministry of Transport in 1950 following an adverse report of the House of Commons Committee of Estimates);

(b) that motor vehicle testing-stations should be set up, and that there should be periodical tests of vehicles at owners' cost;

(c) that suitable notices concerning the use of alcohol by drivers be displayed on licensed premises — a matter in which the brewers themselves have taken the initiative;

(d) that driving tests should be compulsory following suspension for such offences as dangerous driving;

(e) and that the value of special signs to mark black spots should be determined experimentally.