

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

*1973 – Parliamentary Paper No. 160*

# ROAD SAFETY

## A NATIONAL AUTHORITY THE CONSTITUTIONAL POSITION STATISTICAL NEEDS

**First Report from the House of Representatives  
Select Committee on Road Safety**

**September 1973**

---

Presented by Command and ordered  
to be printed 25 September 1973

---

THE GOVERNMENT PRINTER OF AUSTRALIA  
CANBERRA 1973

### **Personnel of the Committee**

Mr B. Cohen, M.P., (*Chairman*)

Mr E.M.C. Fox, C.B.E., M.P.

Mr D.J. Hamer, D.S.C., M.P.

Mr U.E. Innes, M.P.

Hon. R.C. Katter, M.P.

Dr R.E. Klugman, M.P.

Mr D.C. McKenzie, M.P.

*Clerk to the Committee:*

Mr R.J. Beggs.

## CONTENTS

<i>Chapter</i>	<i>Para. No.</i>	<i>Page No.</i>
Recommendations . . . . .		1
1 Introduction . . . . .	1— 6	3
2 The Problem . . . . .	7—30	4
3 The Constitutional Position . . . . .	31—34	10
4 A National Authority on Road Safety and Standards . . . .	35—47	11
5 Statistical and Other Information Needs for Road Safety . .	48—80	15
<i>Appendixes</i>		
A List of witnesses . . . . .		21
B Road accident fatalities and injuries by States from 1962		24
C Serious road accidents by States — 1962-1972 . . . . .		26
D Road traffic accident fatalities — Australia, 1962-1972		27
E Road traffic accident statistics — Australia — number of casualty accidents and persons injured, 1962-1972		28
F Road accident fatalities and injuries — Annual changes		29
G Road traffic accident fatalities — Average driver fatalities per age group, Australia, 1971 . . . . .		30
H Road safety authorities operating in Victoria . . . . .		31
I Government authorities — involvement in collection, processing and publication of road traffic accident statistics . . . . .		32
J Data items extracted by the Commonwealth Bureau of Census and Statistics . . . . .		33
K State legal requirements to report accidents . . . . .		41
L Deaths — table supplied by the Mutual Life and Citizens Assurance Co. Ltd in evidence . . . . .		42
M Road Trauma Committee of the Royal Australasian Col- lege of Surgeons: sources and techniques of data collection in pattern of injuries survey . . . . .		43



## RECOMMENDATIONS

The Committee recommends that:

1. The Australian Government take steps to examine the constitutional position in the light of the opinions contained in this report with a view to removing any barrier to the implementation of recommendations of this Committee or of any duly constituted authority. (Para. 34)
2. The Australian Government legislate for the creation of a National Authority on Road Safety and Standards as a statutory authority with a full-time Commissioner of First Division status. (Para. 47 (a))
3. The Authority have the following functions:
  - (a) advise the Minister for Transport on road safety including proposals for financial assistance to the States for this purpose;
  - (b) formulate, in consultation with the relevant State and Australian authorities, proposals in respect of:
    - motor vehicle standards;
    - road safety standards in respect of highway engineering, traffic management, roadside furniture and town planning; and
    - uniform traffic codes;
  - (c) certify compliance of motor vehicles and vehicle components with approved standards;
  - (d) prepare road safety impact statements in respect of transport and urban development programs being financed to a significant degree out of Australian Government funds;
  - (e) conduct road safety research on a multi-discipline basis by the use of outside bodies and persons and of its own staff and facilities;
  - (f) collect and disseminate road safety research information;
  - (g) collect and disseminate in consultation with the Bureau of Census and Statistics national statistical information required by workers in the various disciplines relevant to road safety and relating to such topics as drivers, vehicles, accidents etc., on an Australia-wide basis;
  - (h) conduct road safety education and publicity campaigns and co-ordinate State and Territory efforts in this field. (Para. 47 (b))
4. There should be a part-time Advisory Committee on Road Safety Research and Information to advise the Minister on major research projects and to assist the Commissioner in facilitating communication with the various bodies associated with road safety. (Para. 47 (c))
5. The Advisory Committee include a part-time Chairman and that the Commissioner be an executive member of the Committee. (Para. 47 (d))

6. A Central Information Service be created within the National Authority on Road Safety and Standards and that this should include a national data base of road safety and related statistics, developed in consultation with the Commonwealth Statistician and charged with the following functions:

- (a) to explore user requirements and the relevance of statistics and other data to the reduction of traffic accidents and identify, and recommend to collecting agencies, data requirements;
- (b) to work with relevant authorities towards the development and general use of:
  - (i) uniform definitions and concepts;
  - (ii) uniform data collection forms;
  - (iii) compatible data processing and storage systems;
- (c) to bring together all relevant data from other agencies, both Australian and foreign, and establish a data base to serve research and statistical purposes;
- (d) to produce, and integrate when appropriate, data analyses, case studies, etc., for research purposes and public information. (Para. 79)

7. The Australian Government make a grant of up to \$20,000 to the Royal Australasian College of Surgeons to assist the Road Trauma Committee to complete its survey of road accident injury patterns. (Para. 80)

## 1. INTRODUCTION

1. On 12 April 1973, the Committee was re-appointed to inquire into and report on:
  - (a) the main causes of the present high level of the road toll in Australia;
  - (b) the most effective means of achieving greater road safety in Australia;
  - (c) the particular aspects of the problem to which those concerned with road safety could most advantageously direct their efforts; and
  - (d) the economic cost to the community of road accidents in Australia in terms of:
    - (i) material damage;
    - (ii) loss of man-hours and earning capacity; and
    - (iii) cost of treatment of accident victims.
2. In its Resolution of Appointment the Committee was given the power to consider and make use of minutes of evidence and records of the Select Committee on Road Safety appointed during the Twenty-seventh Parliament.
3. The Committee also was given leave to report from time to time. This report is the first of a series of reports which the Committee will be making to the House of Representatives on particular areas of the road safety problem, during the course of its inquiry.
4. The Committee held its first meeting on 3 May 1973, and since then has met on 20 occasions, 11 of which were for public hearings. Inspections were made of the General Motors Holden testing station at Lang Lang, Victoria, the Safety Instructional Centre, Mount Lawley, Western Australia and Crestwood Estate, a Radburn style housing development in Western Australia. The Committee also attended a seminar on Road Safety and the Law, arranged by the Department of Transport for the Expert Group on Road Safety.
5. Since it was re-appointed the Committee has heard evidence from 70 witnesses (see Appendix A), taken 2,300 pages of evidence and received many exhibits. In addition to submissions received by the previous Committee, around 60 submissions have been received and many more are expected.
6. The Committee records its appreciation for the co-operation and assistance provided by State and Commonwealth Departments, especially the Commonwealth Bureau of Census and Statistics.

## 2. THE PROBLEM

7. Australia has experienced a rising trend in road accident injuries and fatalities until recent years. In the ten-year period to December 1972, around 820,000 people were injured and almost 33,000 killed in road accidents. This increased carnage has tended to offset reduced death rates through improved medical knowledge, and is tending to strain the hospital and other medical facilities normally available for other usage (see Appendices B and C).

8. The enforcement of compulsory seat belt legislation, first in Victoria in January 1971, and then in other States and Territories has reduced deaths and injuries in 1971 and 1972. Fatalities fell from 3,798 in 1970 to 3,590 in 1971 and again in 1972 to 3,422. However, the total has begun to rise again in 1973 with 2,044 occurring in the 7 months to July 1973 (1,905 in the same period in 1972). Injuries almost stabilised over the last few years with a change in the pattern of injury due to the usage of seat belts.

9. Without compulsory seat belt legislation the death rate probably would have been around 4,000 in 1972 compared with actual deaths of 3,422 whilst injuries in 1972 probably would have been around 98,000 compared with 89,766 (see Appendix E). Seat belts will be discussed further in a later report.

10. The experience of each State and Territory shows varying annual increases in road accident fatalities and injuries (see Appendix F). Between 1962 and 1966 fatalities rose steadily for the whole of Australia by around 6 per cent per annum. In 1967, the first decrease in fatalities occurred and this was reflected in all States except Queensland and Western Australia. The increase in fatalities resumed in 1968 and between then and 1970 the annual growth rate for Australia was again 6 per cent. The States showed the following annual growth rates over the two periods:

State	Approximate annual growth rate of fatalities	
	1962-66 per cent	1967-70 per cent
N.S.W. . . . .	8	8
VIC. . . . .	4	6
QLD . . . . .	4	2
S.A. . . . .	8	12
W.A. . . . .	9	10
TAS. . . . .	13	5
AUSTRALIA . . . .	6	6

11. Over the next two years, fatalities showed their first major decline with total reductions of 208 and 166 respectively in 1971 and 1972 with New South Wales showing the largest reduction in 1972 of 157. However, Queensland rose by 57 and Tasmania rose by 12 in 1971 and in 1972 South Australia rose by 20 and Western Australia by 8.

12. The average numbers of deaths in each age group, in 1971 and 1972 were:



## FATALITIES

Age group	Drivers		Passengers		Pedestrians and Cyclists		Motor cyclists	
	1971	1972	1971	1972	1971	1972	1971	1972
0-6	—	—	14	14	11	14	—	—
7-16	20*	16*	15	16	13	13	10*	10*
17-20	70	58	76	64	8	12	33	36
21-29	47	42	21	26	6	7	8	11
30-39	22	18	7	8	5	4	1	1
40-49	16	16	8	7	7	4	1	1
50-59	13	12	10	7	9	9	—	1

\* Assuming one year only for averaging purposes.

It will be seen that the age group 17-20 years provides by far the largest number of deaths in all categories except pedestrians and the 21-29 year age group is the next highest. In 1972 the greatest reductions were in the 17-20 age group.

13. Female drivers are involved in fewer fatalities than males. This is especially marked in the 17-20 year age group (see Appendix G). Young women who have just passed their driving test have been shown to have a lower crash rate per mile than their male equivalents.

14. The 60-years-and-over age group yielded the following total fatalities:

	1971	1972
Drivers . . . . .	153	132
Passengers . . . . .	136	132
Pedestrians and cyclists . . .	289	284

This age group totalled over three times the number of pedestrian accidents of the next highest group of 50-59 years.

15. Pedestrians represent around 50 per cent of persons killed in urban road accidents. The young and old pedestrians make up around 60 per cent of those involved. In rural areas, few pedestrians are involved in fatal accidents.

16. Statistics covering all traffic accidents are not published because of variations in the definitions of an accident (see later comment in this report). Total road accidents involving deaths and injuries showed an almost continuous increase between 1962 and 1970 with an annual rate of growth of over 4 per cent. In 1966 there was a slight fall, in 1971 the total stabilised at 65,210 but rose to 65,750 in 1972. The quarter ended December 1972 yielded 17,820 injury and fatal accidents compared with 16,338 in 1971. This could mean a return to a rising trend in serious road accidents.

17. Road accidents have shown a tendency to rise with the growth in numbers of vehicles and population. A better measure of the rate of exposure to danger on the road was said to be the number of vehicle-miles travelled.

18. The number of persons killed per 10,000 vehicles registered remained constant at 8 between 1966 and 1970 but fell over the next two years to 6 in 1972. The rate per 100,000 population rose from 28 in 1966 to 30 in 1970 but fell over the next two years to 26 in 1972.

19. In 1972, around 20 per cent of all serious accidents occurred on a Saturday, 17 per cent on a Friday, 15 per cent on a Sunday, 13 per cent on a Thursday and 12 per cent on each other day. A similar pattern was established by deaths resulting from these accidents. Around 24 per cent occurred on a Saturday, 17 per cent on a Friday and a Sun-

day and 10 per cent to 12 per cent on each other day. It will be seen that Saturday is far more productive of serious and fatal accidents than any other day of the week.

20. During 1972, serious and fatal accidents showed the following pattern:

	<i>Serious Accidents</i> per cent	<i>Deaths</i> per cent
Midnight to 2.00 a.m. . . . .	6.1	8.7
2.00 a.m. to 4.00 a.m. . . . .	2.4	4.0
4.00 a.m. to 6.00 a.m. . . . .	1.5	2.2
6.00 a.m. to 8.00 a.m. . . . .	6.1	4.8
8.00 a.m. to 10.00 a.m. . . . .	7.7	4.7
10.00 a.m. to midday . . . . .	7.5	5.4
Midday to 2.00 p.m. . . . .	8.3	5.8
2.00 p.m. to 4.00 p.m. . . . .	11.3	9.4
4.00 p.m. to 6.00 p.m. . . . .	17.6	14.8
6.00 p.m. to 8.00 p.m. . . . .	13.2	14.7
8.00 p.m. to 10.00 p.m. . . . .	8.7	11.2
10.00 p.m. to midnight . . . . .	9.4	13.7
Not stated . . . . .	0.2	0.6
Total . . . . .	100.0	100.0

In 1972 almost 31 per cent of serious accidents and 30 per cent of deaths occurred between 4.00 p.m. and 8.00 p.m. each day, which would be expected because it is the peak period of road usage. However, the 4.00 p.m. to 6.00 p.m. had around 18 per cent of serious accidents yielding 15 per cent of deaths, whereas the 6.00 p.m. to 8.00 p.m. had 13 per cent of serious accidents yielding 15 per cent of deaths. The period 6.00 p.m. to 6.00 a.m. experienced 41 per cent of serious accidents yielding 55 per cent of deaths. Thus it will be seen that the hours of darkness are much more productive of serious accidents and death than daylight hours, especially when the bulk of travel is made during the day.

21. The cost of road accidents in Australia has been estimated by John Paterson Urban Systems, in a document prepared for the Expert Group, at 1.7 per cent of Gross National Product in 1969. Troy and Butlin in their book *The Cost of Collisions* estimated the cost at around 2.3 per cent of Gross National Product. The main difference between these two estimates is the value placed on fatalities. On these bases, the total cost of road accidents in 1972 would have been between \$650 million and \$875 million, with the cost divided approximately as follows (on Paterson's estimate):

	<i>per cent</i>
Vehicle repairs and loss of value . . . . .	42
Injury costs . . . . .	19
Fatalities . . . . .	18
Police and court costs . . . . .	2
Insurance administration . . . . .	12
Legal costs . . . . .	7
Total . . . . .	100

22. The cost is therefore very high in economic terms of loss of production and usage of resources but this does not reveal the pain, suffering and sorrow suffered by the injured and the relatives of the injured and dead; nor does it show the pathos of the living vege-

tables, the paraplegics and quadriplegics that are the real cost of road accidents. On the basis of these cost estimates it will be seen that there is considerable room for further expenditure on accident reduction.

23. One of the major obstacles to obtaining effective co-ordinated action in the road safety area is the fragmentation of the system. The way that authority is divided between different organisations is listed in Appendix H.

24. Another problem area is that of communication. Much of the information received by the public is the result of haphazard highlighting of various aspects of road safety by the media. This acts as the major educating factor in the community and often supplants more rational information being distributed from more authoritative sources.

25. Accidents are a complex problem with there being rarely only one cause. The Committee will be considering the problem under the following main headings:

**A The institutional framework**

- . The proliferation of authorities
- . Constitutional power
- . Legislation
- . Law enforcement
- . Publicity
- . Research

**B Cost of road accidents**

- . The many and varying factors

**C The environment**

- . Traffic engineering and road design
- . Town planning, land usage and exposure to accidents
- . Priority roads
- . Freeways
- . Intersections
- . Traffic signals
- . Street lighting
- . Overpasses
- . Guard rails and guide posts
- . Road surfaces
- . Road marking

**D The vehicle**

- . Speed
- . Design
- . High-powered cars
- . Certification
- . Performance
- . Industry influence

## **D The vehicle (Cont.)**

- . Recalling of vehicles and faults
- . Safety features
- . Seat belts
- . Bumper bars and projections
- . Brakes and automated vehicles
- . Side-bars
- . Windscreen and Door Pillars
- . Indicators
- . Fire risk in vehicles
- . Starter bars
- . Reflectorised number plates
- . Vehicle lighting
- . Other safety features
- . Tyres
- . Inspection and testing
- . Second-hand vehicles
- . Motor cycles
- . Bicycles

## **E The driver**

- . The task
- . Young drivers
- . Provisional licences
- . Testing for licences
- . Education and training of drivers
- . Basic training
- . Instructors
- . Simulators
- . Advanced driver training
- . Alcohol, drugs and driving

## **F The pedestrian**

## **G The road transport system**

- . Private transport
- . Public transport

26. In the past, thinking on road safety had centred on ways in which the driver could be made to fit into the system, with little attention being given to the other elements. This approach has shown to have been quite ineffective in reducing death and injuries which continued to climb despite extensive publicity and other measures aimed solely at the driver, pedestrian or rider. The first major break-through occurred with the introduc-

tion of compulsory seat belt legislation. This has been of world-wide significance and its success has aroused interest for similar legislation in many countries. These comments should not be construed as indicating a reduced need for publicity effort aimed at reminding drivers, pedestrians etc., of the dangers of the road, and of the need for responsible, careful and sober driving. However, there is a need for a more scientific approach to the whole problem including publicity, education, and driver training before and after licensing.

27. In recent years there has been an increasing awareness shown that road safety is such a large problem that the piecemeal approach of the past and the fragmentation (of administration divided between the Australian, State and Local Governments as well as statutory authorities etc.), must give way to a national approach. The Commonwealth has begun to recognise its role in this area and the previous government has provided moneys for road safety. For example, the Expert Group on Road Safety was established in November 1970 to advise the then Minister for Shipping and Transport. Through the Department of Transport, the Expert Group engaged a large number of consultants to undertake surveys of literature on road safety topics and their reports were subjected to comment by organisations working in each topic area. National Road Safety symposiums have also been held. The Expert Group then reported to the Minister on 28 September 1972 and its report was tabled in Parliament.

28. The present Government is continuing to play an increasing role in road safety. The Expert Group was re-appointed by the Minister for Transport who also recommended to the Parliament that this Select Committee be re-appointed.

29. This Committee believes that there must be a whole-systems approach to road transport rather than a piecemeal approach, with balanced development based on overall systematic thinking and administration. This requires co-ordinating responsibility and authority for town planning, land usage, roads, vehicles, drivers, pedestrians, rule-making, enforcement etc. The aim should be to prevent accidents and to reduce the extent of injuries and deaths on the road. People should not die or be disabled for life, for a moment of carelessness, inattention, indecision or error. Drivers and passengers must have a higher chance of survival in crashes by means of safer vehicles and a more forgiving roadside environment.

30. The Committee will be investigating every aspect of the road transport system which will reduce exposure to danger and produce safer driving. Some of its recommendations will be expensive but so are road accidents. Expected savings should well outweigh the cost of such measures.

### 3. THE CONSTITUTIONAL POSITION

31. The Committee believes that much of the lack of direct action by the Australian Government in the past, has been due to insufficient constitutional power in this area. Professor Howard, Hearn Professor of Law, University of Melbourne, said that the States lack power in some areas to be fully effective in the road safety area; he submitted:

- (a) The road toll in Australia is a community problem of such magnitude and destructiveness that it can be tackled effectively only at the national level, which means by the Commonwealth as opposed to the States. Reliance on State initiative has proved to be largely ineffective in the past and in the nature of things may be expected to be equally ineffective in the future.
- (b) The reason assigned for the failure of successive Commonwealth Governments to act in the past has been lack of constitutional power. This reason is without foundation. The Commonwealth has power to impose its own road safety standards on the whole country. Obvious examples of sources of such power are the Commonwealth legislative powers over imports, tariffs, trade with other countries, interstate trade and commerce within Australia, movement within, to and from Commonwealth Territories and places, and the conduct of external affairs. These examples are by no means exhaustive.
- (c) There is no reason why the Commonwealth control which has proved practicable, desirable and outstandingly successful in air and sea transport should not be equally attainable in road transport. I understand for example that Australia's air safety record is one of the best in the world, whereas its road safety record, certainly by comparison with such relevant countries as the United States, Canada and New Zealand, is one of the worst.

32. The Attorney-General's Department was asked for advice on the constitutional power of the Australian Government, in relation to road safety. The Committee was informed that:

- (a) The Australian Parliament has full power to legislate on all aspects of road safety in the Territories and Commonwealth places (subject to section 92 of the Constitution).
- (b) In regard to road safety in other areas, neither the external affairs power, the trade and commerce power nor any other power would enable the Parliament to legislate comprehensively on the matter.
- (c) However, the Parliament could promote road safety there by the following means:
  - (i). road construction and improvement: grants to the States and direct expenditure on the construction and improvement of roads in substantial interstate use;
  - (ii) vehicle standards: direct controls over imported vehicles, vehicles used for interstate traffic and Australian Government vehicles; indirect measures through taxation and perhaps insurance provisions; and some influence through the standards of vehicles permitted in the Territories and Commonwealth places;
  - (iii) rules of the road (including drivers' qualifications): direct controls over interstate traffic.

33. The Committee found that there is some uncertainty regarding the extent of the Australian Government's power to act on road safety matters.

34. The Committee therefore recommends that the Australian Government take steps to examine the constitutional position in the light of the opinions contained in this report with a view to removing any barrier to the implementation of recommendations of this Committee or of any duly constituted authority.

#### 4. A NATIONAL AUTHORITY ON ROAD SAFETY AND STANDARDS

35. In its Report, *The Road Accident Situation in Australia – A National Review*, the Expert Group on Road Safety recommended creating a specialist National Office on Road Safety (Co-ordination and Research) within the Department of Shipping and Transport to support State and Territory efforts in road safety.

36. In evidence to the Committee, Members of the Expert Group said that the National Office should have the ability and resources to:

- (a) take an active role in formulating vehicle safety standards and certification of vehicles, highway engineering, traffic management, roadside hazards, town planning and policies for implementing these standards;
- (b) develop uniform traffic codes;
- (c) conduct road safety research, using outside bodies and its own staff and facilities;
- (d) collect and disseminate research and information;
- (e) collect and disseminate statistics;
- (f) formulate publicity and education policy;
- (g) increase technical and other support for vehicle safety standards, traffic codes, education and publicity; and
- (h) ensure adequate safety features are incorporated in roads financed from Commonwealth grants, especially highways of national importance.

37. The Expert Group said that it had not recommended the creation of a statutory authority in its Report, because it believed such a recommendation might not have been acceptable in the political climate at the time. A short-term view was taken, therefore, that a National Office was needed and that the efficient assistance and support received by the Group from the Department of Shipping and Transport showed that the Department could administer the new Office.

38. The Minister for Transport deferred the creation of the National Office until the Select Committee had considered the matter and made recommendations concerning the form which the National Office should take.

39. Some Members of the Expert Group, in evidence, informed the Committee that they favoured the creation of a National Office as a statutory body because:

- (a) it would increase the stature of the authority, as it would possess a separate personality;
- (b) it would enjoy greater freedom of action;
- (c) it would enjoy self-contained financing and budgetary control;
- (d) it would be able to defend freely and advertise its activities.

However, some members of the Expert Group admitted that if the proposed Office were established within a Department there could be better availability of resources. Also, departmental influence could assist in obtaining liaison with and co-operation from State authorities and the wide institutional road safety framework, whilst success or failure of a statutory body could perhaps depend ultimately upon the degree of autonomy given to it and upon personalities at any given time. If the National Office were to be given power, money and freedom to operate, then it should be a statutory body in its own right and, as such, could make the best recommendations, even if they did not prove to be socially or politically acceptable. If not, it would function better within the Department of Transport.

40. The Road Trauma Committee of the Royal Australasian College of Surgeons and

other witnesses submitted a strong case for urgently establishing a prestigious National Office of Road Safety as a statutory authority; a full-time body with a source of funds able to make authoritative recommendations at a national level on all traffic safety matters.

41. It was said that the National Body should:

- (a) be directly responsible to the Minister for Transport;
- (b) be completely independent of political or other influence;
- (c) be possessed of the necessary expertise to fill their positions, appointed by the Governor-General in Council for a specified term, and be capable of:
  - (i) attracting quality personnel including international experts;
  - (ii) attracting visits from overseas experts;
  - (iii) taking over as full-time the present part-time activities of some of the Australian Transport Advisory Council (A.T.A.C.) advisory committees;
  - (iv) giving comprehensive policy recommendations to A.T.A.C.;
  - (v) being able to communicate directly with the public; and
  - (vi) giving authoritative opinion on all road safety matters;
- (d) independently carry out its statutory functions;
- (e) act as a central point for suggestions and be a sounding board for public opinion;
- (f) be headed by a strong, knowledgeable expert who has proved his ability to administrate and make decisive recommendations without delay;
- (g) have its executive members act as a Board rather than be subject to a departmental head;
- (h) have its own source of funds;
- (i) engage in research itself or sponsor research;
- (j) be composed of full-time personnel;
- (k) table its annual report in Parliament which therefore would be available to the Minister for Transport and appropriate Ministers in all States and Territories;
- (l) be an Authority able to give strong leadership; and
- (m) become a household word like the A.B.C. and C.S.I.R.O.

42. The Department of Transport submitted that:

- (a) the National Authority could take the form of:
  - (i) a Branch or Division within a Department;
  - (ii) a semi-autonomous Bureau with a Department;
  - (iii) a statutory authority like the Bureau of Roads; or
  - (iv) a joint Commonwealth/State body like the Australian Road Research Board;
- (b) major issues to be considered are:
  - (i) whether the functions suggested for an Authority are consistent within the role and power of the Australian Government;
  - (ii) whether the Authority should deal with all or only some of the various road safety activities of the Australian Government, in particular:
    - . collection and analysis of relevant data;
    - . formulation of policy recommendations for remedial action; and
    - . implementation of approved measures;
  - (iii) whether a separate road safety authority organisation is likely to hinder or help efforts to attract quality professionals in the wide range of disciplines;
  - (iv) what risk there is that a smaller specialist authority might lead to institutionalised thinking on basic lines of research or lose touch with the



- (v) practical problem of implementing remedial measures; and
- (v) what type of organisation could best achieve effective action within the framework of government machinery handling transport matters generally;

42A. The following are desirable terms of reference for a National Authority:

- (a) investigate all aspects of road accident problems so that appropriate action can be taken which could lead to a reduction in the incidence of road accident fatalities and injuries;
- (b) initiate research into road safety by financing and allocating projects to approved institutions for investigating special problems;
- (c) collect, analyse, evaluate and disseminate statistical data on road accidents;
- (d) investigate motor vehicles, their component parts and accessories so as to reduce road deaths and minimise injuries of the occupants, other road users and pedestrians; and
- (e) investigate human factors, especially methods of improving the knowledge, skills, attitudes and practices of all road users, and preventing people affected by alcohol or other drugs from using the roads.

43. To put the recommendations for the National Road Safety authority into effect, it was suggested by various witnesses that:

- (a) the Australian Government could qualify road grants to the States by insisting on high uniform standards of road construction and traffic management, to be recommended by the Authority (any State straying too far from the national standard should forfeit part or all of its grant);
- (b) vehicle design could be more effectively influenced by design rules established through independent testing by the Authority (manufacturers could advise but decisions should be made in their absence); and
- (c) the Australian Government could set its own detailed, rigid safety specifications for vehicles it purchases; this would influence State Governments and would bring pressure on manufacturers to improve the product generally.

44. Another suggestion was for the National Office to cover all transport safety matters including air, sea, rail and road and also might cover industrial and other accidents.

45. The Committee found that there is a need for the creation of a National Authority on Road Safety and Standards; that the stature and freedom of action required by such an authority make it desirable that it be created as a statutory body with a Commissioner of First Division level, answerable only to the Minister for Transport. Such an Authority should be given adequate funds, staffing and power to achieve its objectives.

46. The Committee also found that there should be provision for an advisory committee to advise the Minister on major research projects and assist the Commissioner in facilitating communication with the various bodies associated with road safety. The Commissioner should report annually to Parliament. The Committee expects that this report would incorporate recommendations by the advisory committee.

47. The Committee therefore recommends:

- (a) that the Australian Government legislate for the creation of a National Authority on Road Safety and Standards as a statutory authority with a full-time Commissioner of First Division status;
- (b) that the Authority have the following functions:
  - (i) advise the Minister for Transport on road safety including proposals for financial assistance to the States for this purpose;

- (ii) formulate, in consultation with the relevant State and Australian authorities, proposals in respect of:
  - motor vehicle standards;
  - road safety standards in respect of highway engineering, traffic management, roadside furniture and town planning; and
  - uniform traffic codes;
- (iii) certify compliance of motor vehicles and vehicle components with approved standards;
- (iv) prepare road safety impact statements in respect of transport and urban development programs being financed to a significant degree out of Australian Government funds;
- (v) conduct road safety research on a multi-discipline basis by the use of outside bodies and persons and of its own staff and facilities;
- (vi) collect and disseminate road safety research information;
- (vii) collect and disseminate in consultation with the Bureau of Census and Statistics national statistical information required by workers in the various disciplines relevant to road safety and relating to such topics as drivers, vehicles, accidents etc. on an Australia-wide basis; and
- (viii) conduct road safety education and publicity campaigns and co-ordinate State and Territory efforts in this field;
- (c) that there should be a part-time Advisory Committee on Road Safety Research and Information to advise the Minister on major research projects and to assist the Commissioner in facilitating communication with the various bodies associated with road safety; and
- (d) that the Advisory Committee include a part-time Chairman and that the Commissioner be an executive Member of the Committee.

## 5. STATISTICAL AND OTHER INFORMATION NEEDS FOR ROAD SAFETY

48. Statistical information on the performance of the road transport system is essential to planning and managing the regularity and safety of the system. Knowledge of where the system malfunctions allows experimentation with, and evaluation of, safety counter-measures. The fullest and most accurate statistics would be those extracted on a national basis from uniform collection and processing of standardised data items. Unfortunately, such statistics are only available for a limited range of classifications.

49. Road accident statistics, at both the national and State levels, have been developed by the Bureau of Census and Statistics in conjunction with the Australian Road Safety Council (established by A.T.A.C. in 1947), initially to provide basic material for the Council's research and publicity campaigns. The Bureau is the only body which publishes national accident statistics. In each State and Territory, accident statistics are published by the State Office of the Bureau and the appropriate State Government agency, except in the A.C.T. and N.S.W. Appendix I shows the scope and importance of the Bureau's statistical activities throughout Australia.

50. National accident statistics are published by the Bureau's central office in relation to data items common to all State and Territory traffic accident forms. National statistics are therefore somewhat inadequate; e.g., of 199 data items listed in an Attachment to the Bureau's submission to the Committee and appearing in State and Territory police accident report forms, 163 are not published as national statistics, usually because they are not common to all forms. For a summary of that Attachment, see Appendix J.

51. Accident statistics presently compiled at the national level are generally confined to the number of accidents, persons killed, persons injured, the age and sex of persons killed and injured, the general nature of the accident, some features of the roadway where the accident occurred, and the time of day and the day of week. As in most other countries, the official statistical practice is to concentrate on items of fact and to avoid, as far as possible, aggregates which include some subjective content. According to the Expert Group's Report, the following information on a national basis is not included and is essential if a full understanding of the Australian accident situation is to be possible:

- (a) accident involvement of young drivers in accidents by single year of age;
- (b) details of the particular nature of collisions, e.g. what is being hit and at what angle;
- (c) details of accident intersections by type ('T', 'cross' or 'Y') and by degree of control (e.g. automatic lights, flashing lights, uncontrolled);
- (d) measured blood alcohol levels of drivers and pedestrians involved in accidents;
- (e) location of accidents according to urban or rural density; and
- (f) proportion and position of vehicle occupants uninjured in accidents involving injury to other occupants.

52. The following, additional data items cannot be extracted nationally:

- (i) driver experience in terms of years;
- (ii) type of, and endorsements on, drivers' licences;
- (iii) type, make and model of vehicles involved in accidents;
- (iv) condition of vehicles;
- (v) estimated cost of repairs;
- (vi) weather and lighting conditions;
- (vii) road features and conditions and roadside environment; and
- (viii) whether seat belts or crash helmets worn.

53. The Bureau submitted that it has always been conscious of the unsatisfactory nature of some aspects of the road traffic accident statistics it publishes. Although improvements have been introduced it has been unable to resolve the key problem at the national level that has constantly confronted it: the lack of uniformity between States and Territories in basic reportability legislation, in the range and concept of data collected and the methods by which they are processed. These problems will now be outlined together with the history of attempts to achieve uniformity of collection.

54. Almost all witnesses who gave evidence on statistical needs (including the Bureau of Census and Statistics and the Expert Group), said that further development of road accident statistics in Australia is dependent upon satisfactory implementation of uniform accident data reporting, collecting and processing procedures for all States and mainland Territories. The difficulties experienced generally arise from the current system of collecting data as a by-product of administrative and legal functions under State and Territory legislation. Road and traffic administration in the States is extremely fragmented and all the responsible authorities might want to voice their attitudes to any changes to the police accident report form. Some data collection bodies have different objectives from others and some sort of overall co-ordination is required to stimulate uniformity of data collection. Appendix J shows a long list of Victorian authorities, alone, which have functions relating to road safety.

55. A member of the Expert Group, Mr Pak-Poy, was on a national committee which, in 1960, tried unsuccessfully to devise and introduce a uniform accident report form. He said that every subsequent effort has failed because of parochialism and the difficulty of ensuring that the police officers, who initially record the accident information, are able to collect data in the best, fullest and most uniform manner. With a specialist traffic officer, like those in New Zealand, and with enough manpower, the task would be easier. It is possible to support the normal police officer with researchers, in order to obtain additional information, but in the past researchers have wanted the police officer to answer too many questions. Committees have agreed on a uniform form, but when their members returned to their own jurisdictions they encountered problems in implementing any changes.

56. Commencing in the late 1940's the Commonwealth Statistician held conferences with State accident reporting authorities to obtain uniform national reporting, but without much success. The Deputy Commonwealth Statistician in each State is responsible for servicing State governmental needs. This system has led to the development of different types of statistics in each State, according to users' requests.

57. In 1969 as a result of various bodies requesting uniformity, the Standing Committee of Advisers to the Australian Transport Advisory Council directed that the question of uniformity of records of licence holders, vehicle registration and motor vehicle accident reports, be examined by its *Advisory Committee on Road User Performance and Traffic Codes*.

58. In 1970 this Advisory Committee held preliminary meetings with the Bureau of Census and Statistics and other interested bodies. A Sub-Committee on Uniform Accident Reports was then formed and it considered various approaches to obtaining the necessary details of State and Territory data collection operations. The Department of Transport, as part of its new information service, has a team which was working with State authorities and the Bureau towards a uniform accident report form. However, in view of the Expert Group's proposal to create a National Road Safety Office with the inclusion of statistical data collection functions and information service, the review was deferred until decisions were taken on the National Office.

59. Variations between States in legal requirements to report accidents are shown in

Appendix K. This shows that some States require accident reports only in cases of personal injury whilst others also include damage over a certain value which varies between States. Non-casualty accidents are reported in all States except Tasmania, and national statistics are restricted, therefore, to casualty accidents. As a result, only a few aggregate accident statistics can be published nationally.

60. Another problem is the varying definitions of a casualty accident which must be reported. The determination of a casualty accident depends, in many cases, on the police assessment of the severity of the injuries. Where there is no visible injury (but subsequent medical aid is required), misclassification of the accident may occur.

61. The Expert Group reported that there was a need not only to collect uniform accident data but also to collect other data, including exposure rates, driver experience and records, vehicle performance and road conditions, and to integrate this with accident data so as to gain the fullest appreciation of the human, environmental and vehicular background to accidents. Integration requires compatible processing techniques and equipment. Some of the few studies being undertaken in this field and the sort of data, other than accident report data, which needs to be collected and integrated at a national level, will be outlined in the following paragraphs.

62. One example of the type of data integration program required to yield full statistical appreciation of accident circumstances is the National Capital Development Commission's program in Canberra. The Commission is engaged in a detailed statistical analysis of accident data combined with traffic volume studies, in order to identify existing or developing hazardous locations in Canberra. This is followed by further detailed investigation to determine particular hazards at those trouble spots selected for monitoring. From this comparative information of each location and the analysis of detailed collision diagrams, decisions are made on provision of traffic control devices. If the hazard is related to physical layout or road conditions, the Commission and the Department of the Capital Territory can then operate to correct or modify the situation. Special attention is given to the high-risk intersections, as well as those with a high number of accidents.

63. Accident data is recorded by the A.C.T. Police Accident Squad on an updated accident report form introduced in 1973 through collaboration between the Commission, the Department of the Capital Territory, the A.C.T. Police and others. The circumstances of every road accident are recorded and a copy of each report is forwarded to the N.C.D.C. for processing. Safe road design, traffic flow and town planning (all Commission functions) are thereby facilitated. The accident data is used also by the Department of the Capital Territory to help in its evaluation of vehicle and driver performance, which will be facilitated also by its computerising of licence, registration and traffic accident records, to be used in such research projects as the correlation between age, experience and propensity to accidents.

64. Analysis of accident data relates to hazards discovered after an accident situation has developed. However, it is preferable (though more difficult) to analyse data before a situation develops. The Commission therefore monitors, measures and forecasts traffic flow growth for planning and for accident reduction. Through detailed processing of traffic flow data in relation to expected growth of accident rates, the Commission can frequently anticipate developing hazardous situations and thus initiate the necessary safety measures.

65. These Canberra practices illustrate the sort of purposeful data production, integration and utilisation which could well be followed in developing urban areas.

66. The proper assessment of traffic accident rates must include measuring exposure to risk. Exposure in terms of vehicle-miles travelled is obtained from periodic surveys of motor vehicle usage conducted by the Bureau, from traffic-counting programs of State

road and traffic authorities and from regional transportation assessment. The Bureau is currently processing a Survey of Motor Vehicle Usage relating to the twelve months ended September 1971, mainly to provide essential statistical information for government and private agencies involved in planning Australian road transport policy and an adequate system of roads. A census of motor vehicles on register at 30 September 1971, undertaken in conjunction with the current survey of motor vehicles usage, is now being processed and final results are expected to be available later this year.

67. The Bureau also publishes limited data of the number of drivers' and riders' licences in force at 30 June each year for each State and Territory except Queensland (which has an extended licence period). More detailed tables (e.g. licence holders by age and sex) are produced in those States where the licensing system permits. This information is used in research studies but is limited at the national level by lack of uniformity in the licensing laws and procedures between the various States and Territories.

68. Exposure rate data, the Expert Group said, was only of real value when integrated with data on factors which vary in each accident such as vehicle type, driver age, time of accident, road conditions and density of development near the road. This view was shared by Mr Deer, General Manager of the Mutual Life and Citizens Assurance Co. Ltd.

69. National statistical information on vehicle type, make and model is not presently available, but could be obtained in two ways (of which the first is preferable, because it is more comprehensive):

- (a) introduction of a uniform item on accident reporting forms concerning type, make and model; or
- (b) collation of data from insurance company records covering all third party and comprehensive insurance claims (these statistics would not cover those many minor accidents not resulting in claims).

70. Vehicle insurers in Australia who are members of the Fire and Accident Underwriters' Association contribute to the Association's central data base for the insurance industry. These records are used by insurers, for example, in determining categorisation of vehicle models according to different premium categories, which vary with average accident involvement and repair cost for the model. It seems that few requests outside the insurance industry are made for production of records data. Mr Deer said that life and vehicle insurers employ computer facilities which would make available an increasing supply of road accident data.

71. The Mutual Life and Citizens Assurance Co. Ltd provided information for the Committee on age, and causes of deaths during 1971 of its life assurance policy holders. These are shown in Appendix L. Insurance records were recognised as a fruitful data source by the Road Trauma Committee of the Royal Australasian College of Surgeons, especially if third party claim forms were made uniform. The General Manager of the N.S.W. Government Insurance Office said that his company had not been approached to collate statistical data from their files, although it is presently helping Dr Henderson of the Traffic Accident Research Unit with a survey of neck injuries.

72. A wide variety of data, other than from accident report forms, is presently collected by numerous bodies, in addition to insurance companies, mainly for their own use. Such institutions as hospitals, road, traffic and licensing authorities, coroners, tow truck and panel-beating concerns, ambulance authorities and courts officers all keep records which should be processed and integrated in a uniform manner throughout Australia. These records when processed could assist in defining the cost, severity, type and perhaps causes of accidents and injuries. The Road Trauma Committee, in its survey on injury patterns, has shown that it is feasible to collect and integrate all this data on a State and nation-wide, multi-disciplined basis. Appendix M explains the various information sources

and collection techniques used in the survey, as well as itemising the many authorities who would benefit from development of mass data. The need for processing and integrating data through one system from sources other than accident report forms was emphasised by many other witnesses, including Dr Henderson, the Expert Group and Dr Lane.

73. The Road Trauma Committee said:

- (a) that the system should:
  - (i) be a State-based operation;
  - (ii) act through a single authority within each State, representative of data collectors and responsible for collection, analysis and dissemination of material (with legislation for enforcing and supervising the data collection);
  - (iii) include a national agency, probably the Bureau, for compilation from State sources of national statistics and to oversee and monitor the compatibility and completeness of State records; and
- (b) that this system could develop from the mechanism it used in its pattern-of-injury survey (outlined in Appendix M).

It experienced problems of authority, money, experts and personnel shortages in personnel shortages in performing the survey. There were also problems of obtaining computer personnel and computer time because insurance underwriters have provided these facilities on a goodwill basis but the survey analysis work must fit in with other insurance work. Dr Nelson, Director of the Survey, estimated a need for between \$15,000 and \$20,000 to complete the analysis.

74. The need for statistical co-ordination is highlighted by the present fragmentation of information gathering and research effort. At an A.T.A.C. meeting in June 1972, the State Transport Ministers agreed that a central information service was desirable. The Expert Group made a similar recommendation in its Report and the Department of Transport is at present developing a service within the Department. According to Dr Lane, better records are likely if a single institution in each State is responsible for maintaining records and if interstate co-ordination and oversight is achieved by a national specialist statistical body.

75. The Expert Group and many other witnesses, in emphasising the need for a national road safety body, also included the need for a central statistical and information service to direct and co-ordinate efforts towards production of the widest possible range of useful national statistics. For example, the General Manager of the N.S.W. Government Insurance Office, Mr Porter, stated in his submission that at the national level there should be determined, in consultation with insurers, what statistics are required from such information as could reasonably be furnished by insurers. At present most researchers approach the State Offices of the Bureau.

76. The Minister for Transport responded to the Expert Group's proposal by recently recommending to Cabinet the formation of an information and statistical interpretation service within the Department.

77. The greatest problem in obtaining useful Australian statistics has been the lack of uniform accident reporting with a uniform report form and definitions. However the problem goes deeper than this. There are many data collection centres which are processing data on computers or are introducing computer systems which are not compatible with the overall system. There is a need for integration of records of licences, registrations, accidents, etc., i.e. uniformity of processing both accident report data and other data relative to road safety needs. The Expert Group recommended creating a central information service within a National Office of Road Safety.

78. The Committee found that there is a need for a central information service on road safety and related matters to be created within the National Authority on Road Safety and Standards. This information service should include a national data base and, in consultation with the Commonwealth Bureau of Census and Statistics, would:

- (a) explore user requirements and the relevance of statistics and other data to the reduction of traffic accidents and identify, and recommend to collecting agencies, data requirements;
- (b) work with relevant authorities towards the development and general use of:
  - (i) uniform definitions and concepts;
  - (ii) uniform data collection forms;
  - (iii) compatible data processing and storage systems;
- (c) bring together all relevant data from other agencies, both Australian and foreign, and establish a data base to serve research and statistical purposes; and
- (d) produce, and integrate where appropriate, data analyses, case studies, etc. for research purposes and public information.

There will still be a need for collection and interpretation of information at the source so as to:

- (a) permit local and State authorities to plan new areas, change existing ones and instal traffic controls etc.; and
- (b) permit licensing, registration and accident records to be integrated for monitoring driver records, etc.

79. The Committee therefore recommends that a Central Information Service be created within the National Authority on Road Safety and Standards and that this should include a national data base of road safety and related statistics, developed in consultation with the Commonwealth Statistician and charged with the following functions:

- (a) to explore user requirements and the relevance of statistics and other data to the reduction of traffic accidents and identify, and recommend to collecting agencies, data requirements;
- (b) to work with relevant authorities towards the development and general use of:
  - (i) uniform definitions and concepts;
  - (ii) uniform data collection forms;
  - (iii) compatible data processing and storage systems;
- (c) to bring together all relevant data from other agencies, both Australian and foreign, and establish a data base to serve research and statistical purposes; and
- (d) to produce, and integrate where appropriate, data analyses, case studies, etc. for research purposes and public information.

80. The Committee also recommends that the Australian Government make a grant of up to \$20,000 to the Royal Australasian College of Surgeons to assist the Road Trauma Committee to complete its survey of road accident injury patterns.

September 1973

B. Cohen  
Chairman



## APPENDIX A

### LIST OF WITNESSES

AITKEN, Mr D.H.	Commissioner of Main Roads, Western Australia.
AUSTIN, Mr L.L.	Representative, Australian Tyre Manufacturers' Association.
VERY, Sergeant G.G.	New South Wales Police Traffic Branch.
BAGNALL, Mr A.J.	Assistant Statistician, Rural Transport and Private Finance Branch, Bureau of Census and Statistics, Australian Capital Territory.
BARROW, Dr L.N.	Psychologist, New South Wales.
BARTLETT, Mr R.H.	Representative, Australian Automobile Association, Victoria.
BORCHARDT, Mr H.A.	Senior Lecturer, School of Mechanical and Industrial Engineering, University of New South Wales.
BOULTON, Mr J.B.	Executive Director, National Safety Council of Western Australia.
BOYKETT, Mr B.H.	Chairman, Road Safety Council of South Australia.
BRAITHWAITE, Mr J.B.	Graduate Student, University of Queensland.
BURTON, Mr W.M.L.	Alderman, Brisbane City Council, Queensland.
CAMPBELL, Brigadier E.F.	Member, Expert Group on Road Safety, Victoria.
COSGROVE, Mr K.G.	First Assistant Secretary, Department of Transport, Australian Capital Territory.
COURT, Assistant Commissioner R.J.	Police Department, Western Australia.
CRIPPS-CLARK, Mr G.P.	Chief Engineer, Catasphere Bead Company, Rydalmere, New South Wales.
DEER, Mr A.F.	General Manager, Mutual Life and Citizens' Assurance Company Limited, New South Wales.
DOOLEY, Mr B.J.	Member, Road Trauma Committee, Royal Australasian College of Surgeons, Victoria.
DUNCAN, Mr J.A.	Department of the Capital Territory, Australian Capital Territory.
FISHER, Miss R.M.	Research Assistant, Victorian Automobile Chamber of Commerce.
GENEROWICZ, Mr B.	Lecturer in Highway Engineering, Western Australia Institute of Technology.
GIBB, Mr D.J.	Promotional Representative, Road Trauma Committee, Royal Australasian College of Surgeons, Victoria.
GRIGO, Superintendent W.H.	Police Traffic Branch, Perth, Western Australia.
GRIMSHAW, Mr R.S.	Representative, Readymix Group of Companies, Victoria.
HART, Mr S.B.	Director of Planning, State Planning Office of South Australia.
HOLLOWAY, Sergeant R.M.	New South Wales Police Traffic Branch.
HOWIE, Senior Inspector T.R.	New South Wales Police Traffic Branch.
HUGHES, Mr E.S.R.	Chairman, Road Trauma Committee, Royal Australasian College of Surgeons, Victoria.
HUXTABLE, Mr E.A.	Representative, Australian Automobile Association, New South Wales.
JAMIESON, Dr K.G.	Representative, Road Trauma Committee, Australian Medical Association, Queensland.

JOHINKE, Mr A.K.	Commissioner of Highways and Chairman of Road Traffic Board of South Australia.
JOHNSON, Mr C.R.	Victorian Manager, Standards Association of Australia.
JOUBERT, Professor P.N.	Professor in Mechanical Engineering, University of Melbourne.
KEEFE, Mr J.R.	Engineer, Parramatta, New South Wales.
KELLY, Mr A.H.	Executive Vice-President, Victorian Automobile Chamber of Commerce.
KENNY, Mr P.J.	Member, Expert Group on Road Safety, New South Wales.
KENT, Mr G.W.P.	Executive Member, Road Safety Council of the Australian Capital Territory Incorporated.
LANE, Mr D.E.A.	Secretary, Institute of Advanced Motorists, Queensland Branch.
LANE, Dr J.C.	Director of Aviation Medicine, Department of Civil Aviation, Victoria.
LANE, Assistant Commissioner R.M.	New South Wales Police Department.
LLEWELLYN, Mr R.L.	Driver Training Researcher, Australian Capital Territory.
LOVIBOND, Professor S.H.	Head of School of Applied Psychology, University of New South Wales.
LUNN, Mr B.R.	Secretary-General, Automobile Association of Australia, Australian Capital Territory.
MEARES, Mr Justice C.L.D.	Chairman, Expert Group on Road Safety, New South Wales.
MONCK, Mr A.T.	Director, Department of Motor Vehicles, Western Australia.
MORRIS, Mr H.C.	Highways and Traffic Planning Section, Town Planning Department of Western Australia.
NELSON, Mr P.	Member, Road Trauma Committee, Royal Australasian College of Surgeons, Victoria.
OLSSON, Mr C.A.	Regional General Manager, Readymix Group of Companies, Victoria.
PAGE, Mr C.A.	President, Australian Automobile Association, Tasmania.
PAK-POY, Mr P.G.	Member, Expert Group on Road Safety, South Australia.
PEGNUM, Mr B.V.	Traffic Service Engineer, Main Roads Department, Western Australia.
PLEW, Mr B.J.	Secretary, Road Safety Council of South Australia.
PORTER, Mr R.M.	General Manager, Government Insurance Office of New South Wales.
RAMSAY, Reverend P.D.	Research Officer, Queensland Temperance League.
REID, Professor G.S.	Head of the Department of Political Science, Australian National University, Australian Capital Territory.
RITTER, Mr P.	Director, Planned Environment and Education Research Institute, Western Australia.
ROBERTSON, Professor J.S.	Member, Expert Group on Road Safety, South Australia.
SANTAMARIA, Dr J.N.	Director, Department of Community Medicine, St Vincent's Hospital, Melbourne, Victoria.
SOUTHWICK, Mr W.H.	Chairman, Road Safety Council of the Australian Capital Territory Incorporated.
STUCKEY, Dr E.S.	Secretary-General, Australian Medical Association, New South Wales.

SWEENEY, Mr M.F.	Member, Expert Group on Road Safety, New South Wales.
THOMAS, Mr R.J.S.	Commissioner for Main Roads, New South Wales; Representative of the National Association of Australian State Road Authorities.
TONGE, Dr J.I.	Director, State Health Laboratory, Queensland.
TRINCA, Mr G.W.	Deputy Chairman, Road Trauma Committee, Royal Australasian College of Surgeons, Victoria.
WAIT, Mr D.	Head of School of Vehicle Trades, New South Wales Department of Technical Education.
WARD, Mr P.G.	Senior Lecturer, Institute of Criminology, University of Sydney, New South Wales.
WATTERS, Sergeant R.B.	New South Wales Police Traffic Branch.
WETTENHALL, Dr R.L.	Senior Lecturer, School of Political Science, Canberra College of Advanced Education, Australian Capital Territory.
WHITLOCK, Professor F.A.	Professor of Psychological Medicine, University of Queensland.
WIGGLESWORTH, Mr E.C.	Lecturer in Industrial Accident Prevention, Education Department of Victoria.
WILSON, Mr H.J.	National Sales Manager, Catasphere Bead Company, Rydalmere, New South Wales.

APPENDIX B

ROAD ACCIDENT FATALITIES AND INJURIES BY STATES FROM 1962

FATALITIES

Year	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas	N.T.	A.C.T.	Aust.
1963	900	780	398	223	198	75	16	8	2,598
1964	1,010	904	461	238	222	89	25	17	2,966
1965	1,151	929	467	243	252	93	14	15	3,164
1966	1,143	955	466	270	253	104	34	17	3,242
1967	1,117	887	502	253	256	101	27	23	3,166
1968	1,211	949	477	275	320	118	18	14	3,382
1969	1,188	1,011	556	251	311	114	45	26	3,502
1970	1,309	1,061	537	349	351	118	42	31	3,798
1971	1,249	923	594	292	332	130	50	20	3,590
1972	1,092	915	572	312	340	106	53	32	3,422
10 years to Dec. 1972	11,370	9,314	5,030	2,706	2,835	1,048	324	203	32,830
7 months to July 1972	583	524	329	172	184	67	29	17	1,905
7 months to July 1973	677	518	376	180	206	44	29	14	2,044

# ROAD ACCIDENT FATALITIES AND INJURIES BY STATES FROM 1962

## INJURIES

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld.</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1963	24,652	17,577	9,445	8,271	5,399	1,595	313	628	67,880
1964	26,631	19,836	10,383	9,222	5,450	1,709	297	730	74,258
1965	28,157	20,446	10,078	9,491	5,638	1,815	329	769	77,723
1966	28,981	20,160	9,936	9,369	5,997	2,092	446	856	77,837
1967	29,501	20,636	9,850	9,955	6,426	2,095	541	1,017	80,021
1968	30,919	22,095	10,151	8,902	6,553	1,928	512	1,150	82,210
1969	32,752	23,797	10,406	9,961	6,788	2,264	727	1,169	87,864
1970	34,886	23,737	10,940	10,484	7,373	2,171	714	1,249	91,554
1971	36,660	21,371	11,387	10,132	7,328	2,056	926	1,176	91,036
1972*	36,814	20,646	10,788	10,997	6,751	1,968	795	1,007	89,766
10 years to Dec. 1972	310,953	210,301	103,364	96,784	63,703	19,693	5,600	9,751	821,149

\*Provisional

Source: Commonwealth Bureau of Census and Statistics

# APPENDIX C

## SERIOUS ROAD ACCIDENTS BY STATES — 1962-1972

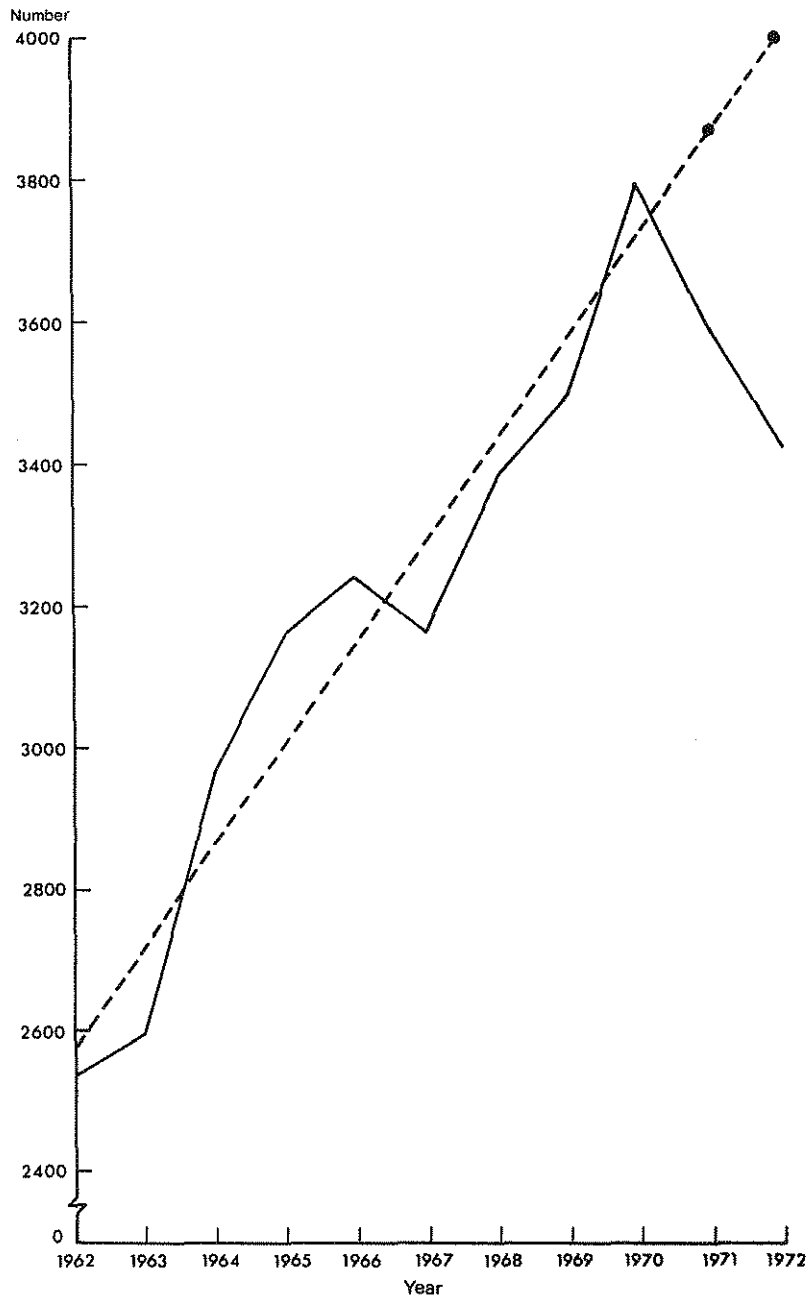
<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld.</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
1963	18,101	12,590	6,724	6,299	4,057	1,051	218	425	49,465
1964	19,399	13,991	7,220	6,998	4,062	1,184	224	476	53,554
1965	21,052	14,336	7,134	7,267	4,170	1,206	232	535	55,932
1966	20,919	14,084	6,878	7,031	4,346	1,377	310	593	55,538
1967	21,610	14,331	7,015	7,242	4,659	1,342	359	695	57,253
1968	22,774	15,377	7,118	6,421	4,708	1,240	357	764	58,759
1969	24,164	16,527	7,494	6,895	4,809	1,416	500	792	62,597
1970	25,434	16,435	7,869	7,424	5,218	1,425	528	877	65,210
1971	26,575	15,023	8,147	7,386	5,178	1,385	660	856	65,210
1972	27,365	14,757	7,863	8,116	4,909	1,371	592	777	65,750
<b>TOTAL</b>	<b>227,393</b>	<b>147,451</b>	<b>73,462</b>	<b>71,079</b>	<b>46,116</b>	<b>12,997</b>	<b>3,980</b>	<b>6,790</b>	<b>589,268</b>

Source: Commonwealth Bureau of Census and Statistics

APPENDIX D

ROAD TRAFFIC ACCIDENT FATALITIES : AUSTRALIA, 1962-1972

(SOURCE : COMMONWEALTH BUREAU OF CENSUS AND STATISTICS)

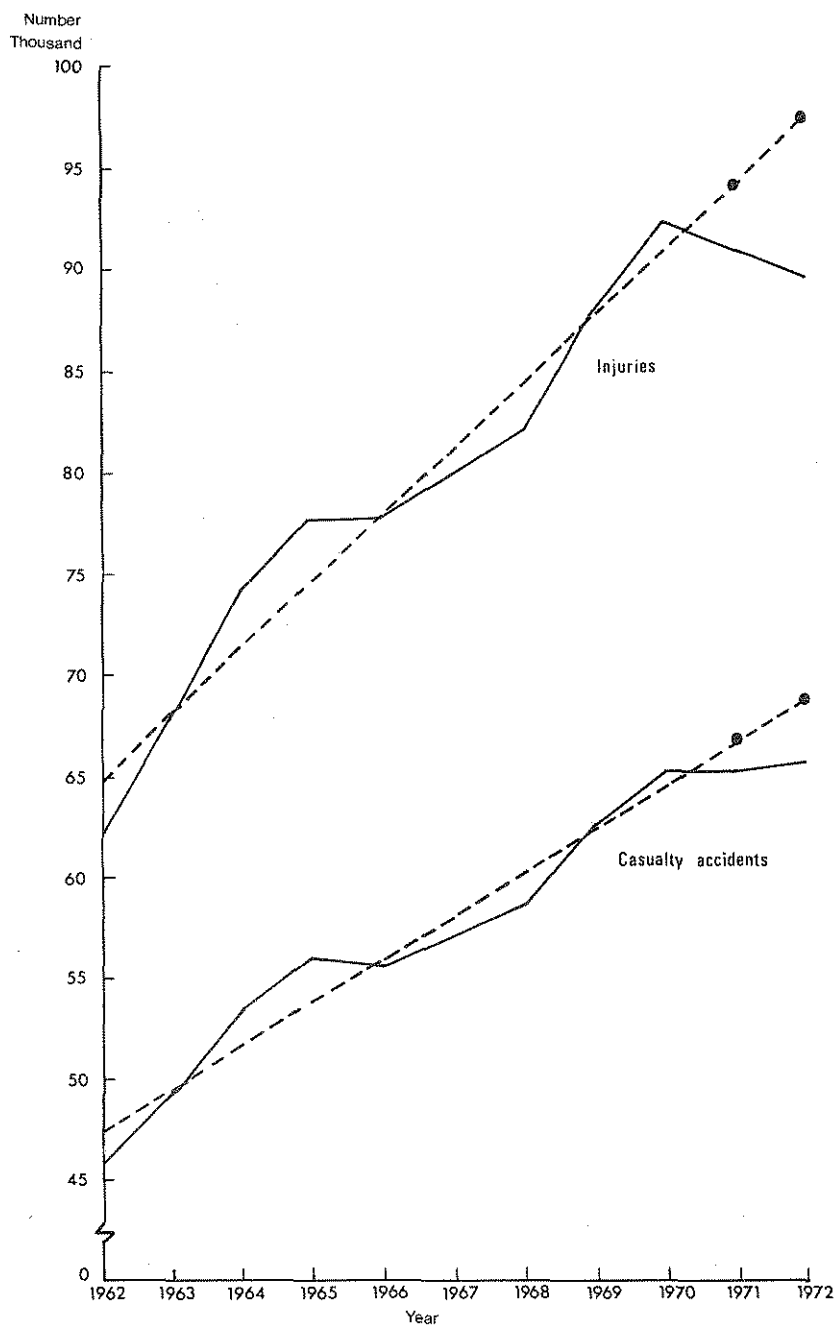


Note: The dotted line shows the line of best fit over years 1962-70.

APPENDIX E

ROAD TRAFFIC ACCIDENT STATISTICS : AUSTRALIA, NUMBER OF  
CASUALTY ACCIDENTS AND PERSONS INJURED, 1962-1972

(SOURCE : COMMONWEALTH BUREAU OF CENSUS AND STATISTICS)



Note : The dotted lines show the line of best fit over years 1962-70.



# APPENDIX F

## ROAD ACCIDENT FATALITIES — ANNUAL CHANGES

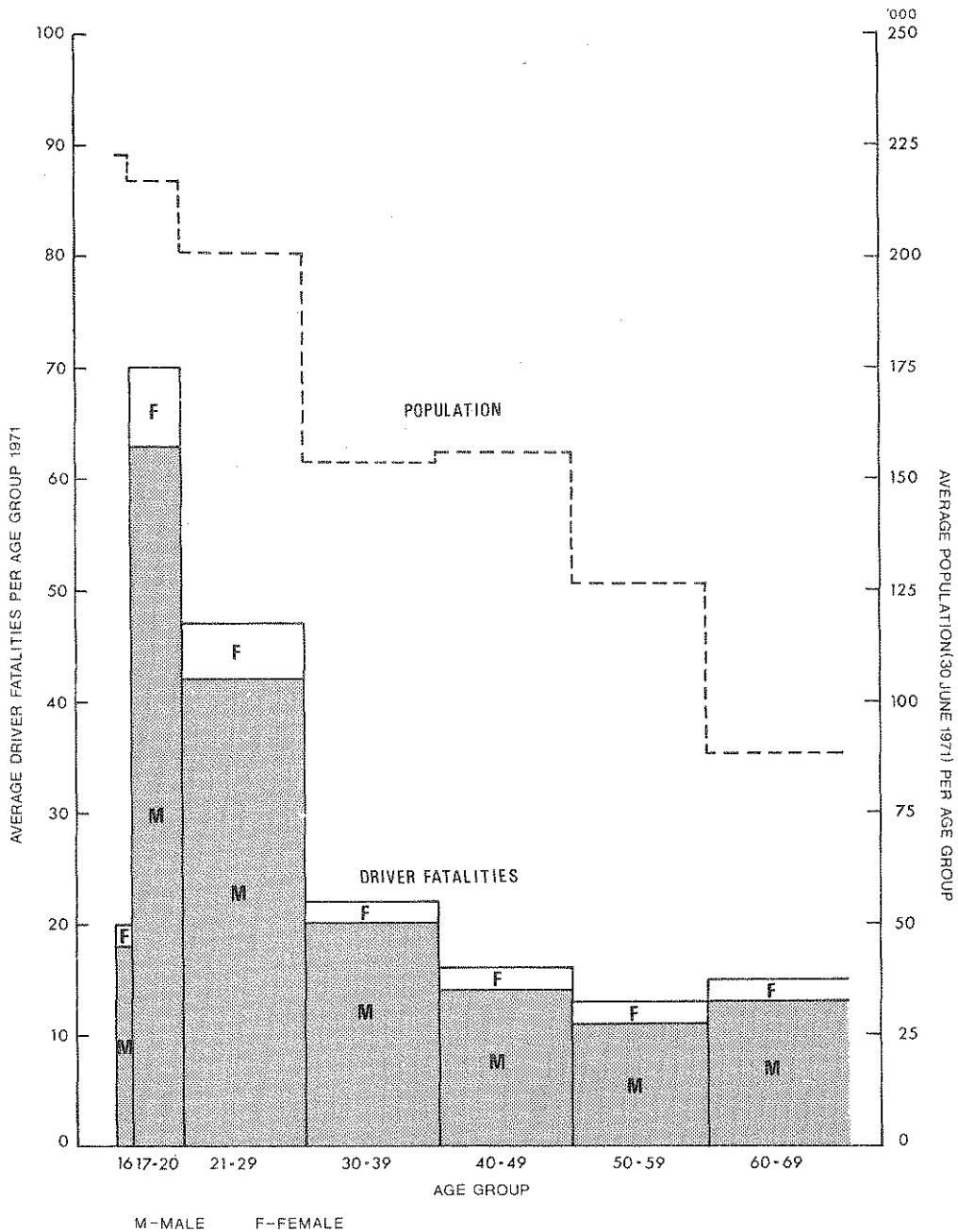
<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld.</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Total</i>
1963	+ 24	- 28	- 5	+ 29	+ 21	+ 14	-	-	+ 55
1964	+ 110	+ 124	+ 63	+ 15	+ 24	+ 14	+ 9	+ 9	+ 368
1965	+ 141	+ 25	+ 6	+ 5	+ 30	+ 4	- 11	- 2	+ 198
1966	- 8	+ 26	- 1	+ 27	+ 1	+ 11	+ 20	+ 2	+ 78
1967	- 26	- 68	+ 36	- 17	+ 3	- 3	- 7	+ 6	- 76
1968	+ 94	+ 62	- 25	+ 22	+ 64	+ 17	- 9	- 9	+ 216
1969	- 23	+ 62	+ 79	- 24	- 9	- 4	+ 27	+ 12	+ 120
1970	+ 121	+ 50	- 19	+ 98	+ 40	+ 4	- 3	+ 5	+ 296
1971	- 60	- 138	+ 57	- 57	- 19	+ 12	+ 8	- 11	- 208
1972	- 157	- 8	- 22	+ 20	+ 8	- 24	+ 3	+ 12	- 168

## ROAD ACCIDENT INJURIES — ANNUAL CHANGES

<i>Year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld.</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Total</i>
1963	+3,184	+ 796	+742	- 50	+322	+437	-	+130	+5,874
1964	+1,979	+2,259	+938	+ 951	+ 51	+114	- 16	+102	+6,378
1965	+2,526	+ 610	-305	+ 269	+188	+106	+ 32	+ 39	+3,465
1966	- 176	- 286	-142	- 122	+359	+277	+117	+ 87	+ 114
1967	+ 520	+ 476	- 86	+ 586	+429	+ 3	+ 95	+161	+2,184
1968	+1,418	+1,459	+301	-1,053	+127	-167	- 29	+133	+2,189
1969	+1,833	+1,702	+255	+1,059	+235	+336	+215	+ 19	+5,654
1970	+2,134	- 60	+534	+ 523	+585	- 93	- 13	+ 80	+3,690
1971	+1,774	-2,366	+447	- 352	- 45	-115	+212	- 73	- 518
1972	+ 154	- 725	-599	+ 865	-577	- 88	-131	-169	-1,270

# ROAD TRAFFIC ACCIDENT FATALITIES : AVERAGE DRIVER FATALITIES PER AGE GROUP AUSTRALIA, 1971

(SOURCE : COMMONWEALTH BUREAU OF CENSUS AND STATISTICS)



Note : Road traffic accident driver fatalities for age group 60-69 also include ages 70 and over; however, it is assumed in this chart that there is no contribution to driver fatalities from this latter group.

# ROAD SAFETY AUTHORITIES OPERATING IN VICTORIA

The following is a reprint of part of a paper given by Mr J.G. Westland, Chairman of the Road Safety and Traffic Authority, Victoria, at the 1972 National Road Safety Symposium in Canberra. The list shows the fragmentation of administrative responsibilities for road safety in Victoria, which could be representative of the other States.

- A.A.A. — Australian Automobile Association.
- A.A.C.C. — Australian Automobile Chamber of Commerce.
- A.C.O.R.D. — Australian Committee on Road Devices.
- A.C.R.U.P.T.C. — Advisory Committee on Road User Performance and Traffic Codes.  
(a committee of A.T.A.C.).
- A.C.S.V.D. — Advisory Committee on Safety in Vehicle Design (a committee of A.T.A.C.).
- A.C.T.D.G. — Advisory Committee on Transport of Dangerous Goods.
- A.C.V.P. — Advisory Committee on Vehicle Performance (a committee of A.T.A.C.).
- A.M.A. — Australian Medical Association.
- A.N.Z.R.C. — Australia and New Zealand Railway Conference.
- A.R.R.B. — Australian Road Research Board.
- A.R.T.F. — Australian Road Transport Federation.
- A.T.A.C. — Australian Transport Advisory Council.
- C.C.P. — Chief Commissioner of Police.
- C.C.R.A.M.M. — Consultative Committee on Road Accident Mortality and Morbidity.
- C.O.S.T.C.E. — Conference of State Traffic Control Engineers.
- C.R.B. — Country Roads Board.
- C.S.O. — Chief Secretary's Office.
- I.E.A. — Institute of Engineers, Australia.
- L.I.C.C. — Liquor Industry Consultative Council.
- M.A.V. — Municipal Association of Victoria.
- M.M.B.W. — Melbourne and Metropolitan Board of Works.
- M.M.T.B. — Melbourne and Metropolitan Tramways Board.
- M.O.T. — Ministry of Transport.
- N.A.A.S.R.A. — National Association of Australian State Road Authorities.
- N.H.M.R.C. — National Health and Medical Research Council.
- N.S.C.A. — State and Territorial Road Safety Councils.
- P.A.C.E.R.S. — Publicity Advisory Committee on Education for Road Safety.
- P.S.V. — Public Service Vehicles.
- P.W.D. — Public Works Department, Victoria.
- R.A.C.S. — Royal Australasian College of Surgeons.
- R.A.C.V. — Royal Automobile Club of Victoria.
- RoSTA — Road Safety and Traffic Authority, Victoria.
- S.A.E. — Society for Automotive Engineers.
- S.C.A. — Standing Committee of Advisers (to A.T.A.C.).
- S.E.C. — State Electricity Commission.
- S.I.A.C. — Safety Inspection Advisory Committee.
- T. & C.P. Board — Town and Country Planning Board.
- T.H.C. — Trades Hall Council, Victoria.
- T.R.B. — Transport Regulation Board, Victoria.
- T.W.U. — Transport Workers' Union, Australia.
- V.A.C.C. — Victorian Automobile Chamber of Commerce.
- V.R.T.A. — Victorian Road Transport Association.

APPENDIX I

INVOLVEMENT IN THE COLLECTION, PROCESSING AND PUBLICATION OF ROAD TRAFFIC ACCIDENT STATISTICS BY GOVERNMENT AUTHORITIES

<i>State/ Territory</i>	<i>Data collection</i>	<i>Editing and coding</i>	<i>Other processing and production of statistics</i>	<i>Other organisations producing road traffic accident statistics</i>
New South Wales	Police	Traffic Accident Research Unit	Traffic Accident Research Unit	
Victoria	Police	Road Safety and Traffic Authority, and Bureau	Bureau	Road Safety and Traffic Authority
Queensland	Police	Bureau	Bureau	
South Australia	Police	Road Traffic Board and Bureau	Bureau	Highways Dept. (Road Traffic Board) Police
Western Australia (Police)	Police	Police and Bureau )	Bureau	Main Roads Department
Western Australia (non-Police)	Local govt. licensing authorities, Police	Bureau )		
		)		
		)		
Tasmania	Police	Bureau	Bureau	Division of Road Safety, Department of Health Services
Northern Territory	Police	Bureau	Bureau	
Australian Capital Territory	Police	Department of the Capital Territory	Department of the Capital Territory	National Capital Development Commission

Source: Page 1682 of Transcript — Evidence from COMMONWEALTH BUREAU OF CENSUS AND STATISTICS.

## DATA ITEMS EXTRACTED BY THE COMMONWEALTH BUREAU OF CENSUS AND STATISTICS

The Commonwealth Bureau of Census and Statistics submission included a list of data items which it extracts from State and Territory accident report forms when compiling accident statistics for each State and, where possible, national statistics. The submission highlights differences between the various accident report forms. The Bureau can only extract national statistics where the same and similarly-defined data items can be extracted.

Of the 199 classificatory items listed in the submission 163 cannot be published by the Bureau for every State and Territory. Many more items could be extracted with cross-referencing but this can be a slow and complicated operation.

The following tables, based on the Bureau's submission, highlight how few uniform, similarly-defined data items are collected in every State and Territory. This summary generally does not note the cross-reference situation and, to this extent, puts the various accident report forms in a more unfavourable light. Extraction by cross-reference is often time-consuming and this summary has treated only those items as extracted (extractable) if their extraction would appear to be relatively easy.

The submission notes a selection of principal cause and responsibility items, where the accident reporter attributes cause of, or responsibility for, an accident. Only the New South Wales, South Australian and Tasmanian forms, generally speaking, contain this type of data and, in any case, the data involves a subjective content. Official practice in overseas countries is usually to avoid such subjective assessment and not to collect this data.

**TABLE OF DATA ITEMS EXTRACTED FROM TRAFFIC ACCIDENT REPORT FORMS**

<i>Category of items for collection</i>	<i>Items published nationally by the Bureau</i>	<i>Items not published nationally by the Bureau</i>	<i>Forms not containing data items in adjacent column</i>
<b>Time</b>	— day of week — time of day		
<b>Cost of Damage (Vehicle and Property)</b>		— vehicle damage? — cost of property damage — minor/major vehicle damage?	— All except Qld. — All except Qld., S.A. — All except Qld., W.A., A.C.T.
<b>Police Inform- ation Source</b>		— police witnessed? — police attended? — accident reported at police station?	— Vic., Qld., W.A., Tas., N.T. — Vic., Qld., W.A., Tas., N.T. — all except A.C.T.
<b>Nature of Accident</b>			
(a) Vehicle to vehicle collision see also (g) below		— angle collision? — rear-end collision? — head-on collision? — side-swipe collision? — other type collision? — hit parked vehicle?	— W.A., A.C.T., N.T. — W.A., A.C.T., N.T. — W.A., A.C.T., N.T. — W.A., A.C.T., N.T. — All except N.S.W. — W.A., Tas., N.T., A.C.T.
(b) Single vehicle accident	— hit fixed object? — left road or overturned?	— vehicle left roadway? — overturned on road?	— W.A., Tas., N.T. — W.A., Tas., N.T.
(c) Vehicle hits pedestrian	— vehicle hits pedestrian?	— location or activity of pedestrian when struck	— Vic., Tas., A.C.T., N.T., S.A.
(d) Vehicle hits animal	— vehicle hits animal?		
(e) Passenger accidents	— passenger injured?		
(f) Vehicle move- ments (see also (a) above)		— overtaking? — moving straight ahead? — turning left/right? — U-turning? — vehicle parking/ unparking? — reversing? — leaving or entering driveway? — skidding? — swerving (e.g. to avoid pedestrian)? — stopped on road? — changing lanes? — on wrong side of road?	— All except Vic., S.A., A.C.T. — All except Vic., S.A., A.C.T. — Qld., W.A., Tas., N.T. — Qld., W.A., Tas., N.T. — Qld., W.A., Tas., N.T. — All except Vic., S.A., A.C.T. — Qld., W.A., Tas., N.T. — All except Vic., A.C.T., S.A. — All except Vic., A.C.T., S.A. — All except A.C.T. — All except A.C.T.

<i>Category of items for collection</i>	<i>Items published nationally by the Bureau</i>	<i>Items not published nationally by the Bureau</i>	<i>Forms not containing data items in adjacent column</i>
<b>Physical Location</b>			
(a) At intersection	- at intersection?	- at cross-intersection? - at T-intersection? - at Y-intersection? - at multiple inter- section?	- All except Vic., S.A., N.S.W. - All except Vic., S.A., N.S.W. - All except Vic., S.A. - All except Vic., S.A., N.S.W.
(b) on straight or curved road	- on straight road? - on open bend? - on obscured bend?	- slight or sharp bend? - level or sloping bend?	- All except S.A. - All except W.A.
(c) At bridge, culvert or causeway	- at bridge, culvert or causeway?		
(d) At dip or causeway		- at dip? - at dip or causeway? - at a median opening?	- All except Qld. - All except S.A. - All except Vic.
(e) At an opening in the median			
(f) At railway level crossing	- at railway level crossing?		
(g) Gradient of road	- on steep hill? - on top of hill?	- on slight grade? - on level road?	- All except Qld., S.A. - All except Qld., S.A., A.C.T.
(h) Parking area		- in parking area?	- All except S.A., A.C.T. *
(i) Type of street		- number of lanes? - one-way street? - free-way or divided highway? - driveway?	- All except S.A. - All except S.A., A.C.T. - All except S.A., Vic. - All except A.C.T.

\*In some States accidents in parking areas are not regarded as road traffic accidents.

<i>Category of items for collection</i>	<i>Items published nationally by the Bureau</i>	<i>Items not published nationally by the Bureau</i>	<i>Forms not containing data items in adjacent column</i>
<b>Traffic control at Location</b>			
(a) Automatic signals	— traffic lights?	— pedestrian lights? — working or not?	— Qld., W.A., Tas., N.T. — All except Vic., S.A., A.C.T.
(b) Railway level crossing	— crossing guarded by lights? — crossing guarded by gates?	— crossing guarded by flagman? — unguarded?	— All except N.T., Vic., N.S.W. — All except Vic.
(c) Controlled by Police	— controlled by Police?		
(d) Signs		— stop signs? — give-way signs?	— N.S.W., W.A., Tas., N.T. — N.S.W., W.A., Tas., N.T.
(e) School crossing		— with/without flags?	— All except Vic., Qld., S.A.
(f) Pedestrian crossing		— at pedestrian crossing?	— Vic., Tas., N.T.
(g) Controls on road, e.g. median strips, traffic lights, barriers		— controls on road?	— All except N.S.W., S.A.
(h) Warning signs		— warning signs?	— All except N.S.W., S.A.
(i) Uncontrolled intersection	— uncontrolled?		
<b>Speed</b>			
(a) Speed of vehicle		— speed	— All except N.S.W., Vic.
(b) Speed limit		— limit	— W.A., Tas., A.C.T., N.T.
<b>Traffic Density</b>			
		— heavy/medium/light density?	— All except S.A.
<b>Road Conditions</b>			
(a) Dryness of road		— dry/wet? — muddy? — snow/ice? — slippery? — obstruction, road- work, etc.?	— W.A., Tas., N.T. — All except Vic., A.C.T. — All except Vic., A.C.T. — All except S.A. — All except S.A.
(b) Road sealing		— sealed/unsealed? — loose surface? — rough surface?	— W.A., Tas., N.T., A.C.T. — All except A.C.T. — All except A.C.T.
<b>Visibility</b>			
(a) Clearness of atmosphere		— clear or fine? — raining? — heavy/light rain? — snowing? — fog? — smoke or dust?	— S.A., W.A., Tas., N.T. — Vic., W.A., Tas., N.T. — All except A.C.T., N.S.W. — All except A.C.T., N.S.W. — S.A., W.A., Tas., N.T. — All except Qld., Vic.,



<i>Category of items for collection</i>	<i>Items published nationally by the Bureau</i>	<i>Items not published nationally by the Bureau</i>	<i>Forms not containing data items in adjacent columns</i>
			A.C.T.
		- daylight/dark?	- W.A., Tas., N.T.
		- dusk or dawn/semi-darkness?	- W.A., Tas., N.T., N.S.W.
		- visibility obstructed by fog, dust or rain?	- All except N.S.W., S.A.
(b) Street lighting		- street lighting?	- Vic., W.A., Tas., N.T.
		- street lighting working?	- All except N.S.W., S.A.
		- good/poor street lighting?	- All except A.C.T.
(c) Visibility obscured		- visibility obscured by objects?	- All except S.A., A.C.T.
		- visibility obscured by dazzle?	- All except N.S.W., S.A., A.C.T.
<b>Class of Vehicle*</b>			
(a) Car or station wagon		- car or station wagon?	- N.T.
(b) Utility or panel van		- utility or panel van?	- N.T.
(c) Truck		- truck?	- N.T.
(d) Semi-trailer		- semi-trailer?	- N.T.
(e) Bus		- bus?	- N.T.
(f) Taxi		- taxi?	- N.T., Qld.
(g) Motor cycle	- motor cycle?		
(h) Bicycle	- bicycle?		
(i) Railway vehicle	- railway vehicle?		
(j) Animal	- animal?		
(k) Vehicle Towing		- vehicle towing?	- All except Vic., Qld., S.A.
		- what was being towed?	- All except Vic., Qld., S.A.
(l) Make/model		- make	- W.A., N.T., Tas.
		- colour	- All except S.A.
		- year of manufacture	- Qld., Tas., N.T., W.A.

\*N.S.W. and Tasmania forms only include vehicles considered responsible.

<i>Category of items for collection</i>	<i>Items published nationally by the Bureau</i>	<i>Items not published nationally by the Bureau</i>	<i>Forms not containing data items in adjacent column</i>
<b>Condition of Vehicle</b>			
(a) General condition (N.S.W. & Tas. include only responsible vehicle).		— good/fair/bad condition?	— All except N.S.W.
(b) Condition of particular components		— brakes in defective or bad condition? — wipers in bad condition? — steering in defective or bad condition? — tyres in defective or bad condition? — lights in defective or bad condition? — turn signals defective?	— All except N.S.W., Tas., S.A. — All except N.S.W., S.A. — All except N.S.W., S.A., Tas. — All except N.S.W., S.A., Tas. — All except N.S.W., S.A., Tas. — All except N.S.W.
<b>Protective equipment worn</b>			
(a) Selt belts		— belts fitted/not fitted? — not known if fitted? — not known if worn? — type fitted? — child restraint fitted? — worn/not worn for passenger/driver? — worn/not worn? — worn/not worn?	— W.A., N.T. — All except Vic., Qld. — N.S.W., W.A., N.T. — All except N.S.W., Vic., A.C.T. — All except Vic. — All except S.A. — N.T., W.A. — All except S.A., A.C.T. (N.B. N.S.W. — only when brain damage is there a question whether helmet worn.) — All except S.A.
(b) Crash helmet		— worn/not worn for passenger/rider? — motor cycle passenger? — motor car passenger? — position of passenger in car? — nursed child?	— Qld., N.T. — N.T., Qld. — All except Vic., S.A., A.C.T. — All except S.A.
<b>Type of Road User (N.S.W. &amp; Qld. &amp; W.A. only when casualties.)</b>			
	(Only when casualties.) — driver? — motor cyclist? — pedal cyclist? — pedestrian?		
<b>Age and Sex</b>			
(a) Casualties	— sex — age		
(b) Persons involved (e.g. driver, pedestrian, motor cycle rider)		— age? — sex? — age of driver only? — sex of driver only?	— S.A., W.A., N.T., A.C.T. — S.A., W.A., N.T., A.C.T. — W.A., N.T. — W.A., N.T.

<i>Category of items for collection</i>	<i>Items published nationally by the Bureau</i>	<i>Items not published nationally by the Bureau</i>	<i>Forms not containing data items in adjacent columns</i>
<b>Licence Details</b> (N.S.W. only for responsible party)			
(a) Learner's permit		— learner's permit?	— Qld., S.A., W.A., N.T.
(b) Provisional licence		— provisional licence?	— All except Vic., Tas. (A.C.T., N.T., & S.A. don't have provisional licences).
(c) Fully licensed		— full licence?	— Qld., W.A., N.T.
		— licensed/unlicensed (including dis- qualified)?	— Qld., W.A., N.T., A.C.T.
(d) Interstate licence		— interstate licence?	— All except Vic., Tas., A.C.T.
(e) Place of residence of driver, rider or pedestrian involved)		— place of residence interstate?	— All except Qld.
<b>Driver experience</b>			
		— experience, usually in terms of groups of years, of respon- sible driver	— All except N.S.W., Tas.
		— experience of all drivers in accident?	— All except Vic., S.A., A.C.T.
<b>Physical defects of driver</b>			
		— nature of defect, whether attributed responsible for accident or not?	— All except N.S.W.
		— nature of defect attributed respon- sible for accident?	— All except N.S.W., S.A., Tas.
<b>Alcohol involvement of road user</b> (N.S.W. includes responsible driver only)			
(a) Breath analysis or blood alcohol test (see also (c) below)		— analysis or test taken?	— N.S.W., W.A., N.T.
		— specific reading	— N.S.W., W.A., N.T.
		— test refused?	— All except Tas., A.C.T.
(b) Post mortem		— blood analysis taken?	— All except Qld.
		— specific reading	— All except Qld.
(c) Opinion of sobriety (see also (a) above)		— obviously affected/ not obviously affected?	— Qld., S.A., W.A., N.T.
		— sober?	— Qld., S.A., W.A., N.T.

<i>Category of items for collection</i>	<i>Items published nationally by the Bureau</i>	<i>Items not published nationally by the Bureau</i>	<i>Forms not containing data items in adjacent column</i>
<b>Pedestrian movements</b>			
(a) Nature of movement		<ul style="list-style-type: none"> <li>- crossing road?</li> <li>- working on road?</li> <li>- playing on road?</li> <li>- lying on road?</li> <li>- standing on road?</li> <li>- walking on road?</li> <li>- boarding a vehicle?</li> </ul>	<ul style="list-style-type: none"> <li>- W.A., Tas., N.T.</li> <li>- W.A., Tas., N.T.</li> <li>- W.A., Tas., N.T., N.S.W.</li> <li>- All except Vic.</li> <li>- W.A., Tas., N.T., N.S.W.</li> <li>- Tas., N.T.</li> <li>- All except Vic., Qld., S.A.</li> </ul>
(b) Location of various movements		<ul style="list-style-type: none"> <li>- location of various movements</li> <li>- emerge from behind parked vehicle?</li> </ul>	<ul style="list-style-type: none"> <li>- All except A.C.T., W.A., S.A.</li> <li>- All except Vic., S.A.</li> </ul>
<b>Nature of Injury</b>			
(a) Location		<ul style="list-style-type: none"> <li>- head?</li> <li>- neck?</li> <li>- limbs?</li> <li>- upper limbs?</li> <li>- lower limbs?</li> <li>- shoulder?</li> <li>- trunk?</li> </ul> <p>(N.B. N.S.W. has details of particular bodily features (e.g. eye, abdomen, foot).)</p>	<ul style="list-style-type: none"> <li>- All except N.S.W., Qld., S.A.</li> <li>- All except N.S.W., S.A.</li> <li>- All except N.S.W., Qld., S.A.</li> <li>- All except N.S.W., Qld.</li> <li>- All except N.S.W., Qld.</li> <li>- All except N.S.W.</li> <li>- All except N.S.W., Qld., S.A.</li> </ul>
(b) Nature of injury		<ul style="list-style-type: none"> <li>- shock?</li> <li>- fractures?</li> <li>- lacerations?</li> <li>- contusions?</li> <li>- concussion?</li> <li>- drowning?</li> <li>- suffocation?</li> <li>- internal injury?</li> <li>- brain injury?</li> <li>- other?</li> </ul>	<ul style="list-style-type: none"> <li>- All except N.S.W., Qld. S.A.</li> <li>- All except N.S.W., Qld.</li> <li>- All except N.S.W., Qld.</li> <li>- All except N.S.W.</li> <li>- All except N.S.W., Qld.</li> <li>- All except N.S.W., Qld.</li> <li>- All except N.S.W., Qld.</li> <li>- All except N.S.W., Qld., S.A.</li> <li>- All except N.S.W.</li> <li>- All except N.S.W., Qld.</li> </ul>
(c) Severity of injury— injured? — killed?		<ul style="list-style-type: none"> <li>- minor injury?</li> <li>- admitted to hospital?</li> </ul>	<ul style="list-style-type: none"> <li>- All except Qld., A.C.T.</li> <li>- N.S.W., W.A., N.T.</li> </ul>
(d) Ejected from vehicle?		<ul style="list-style-type: none"> <li>- ejected?</li> <li>- not known?</li> </ul>	<ul style="list-style-type: none"> <li>- All except N.S.W., S.A.</li> <li>- All except N.S.W.</li> </ul>

## STATE LEGAL REQUIREMENTS TO REPORT ACCIDENTS

The following table defines those road traffic accidents that are required by law to be reported in the States and Territories. Provision is also made for the optional reporting of those accidents not legally required to be reported.

### Legal requirement for road traffic accident reporting

<i>State/Territory</i>	<i>Road traffic accidents required to be reported to Police</i>
New South Wales	(a) All accidents involving personal injury (b) All accidents where aggregate property damage exceeds \$50
Victoria	(a) All accidents involving personal injury (b) All accidents where there is property damage or an animal is injured and the owner or owner's representative is not present
Queensland	(a) All accidents involving personal injury (b) All accidents where aggregate property damage exceeds \$100
South Australia	(a) All accidents involving personal injury and/or injury to an animal (b) All accidents where aggregate property damage exceeds \$50
Western Australia	(a) All accidents involving personal injury (b) All accidents where aggregate property damage exceeds \$100, or where property damage level is in dispute, or where all interested parties are not present
Tasmania	All accidents involving personal injury
Northern Territory	All accidents involving personal injury and/or property damage
Australian Capital Territory	All accidents involving personal injury and/or property damage

N.B. There is no fixed and uniform definition of 'personal injury', so that police officers and other reporters of accidents may report or not report accidents which, respectively, would not or would be reported by others.

# APPENDIX L

The following table, supplied in evidence, records the causes of death during 1971 for holders of life assurance policies with the Mutual Life and Citizens Assurance Co. Ltd.

## TOTAL DEATHS ACCORDING TO MAIN CAUSES

<i>Causes of death</i>	<i>MALES</i>				<i>FEMALES</i>			
	<i>Under 35 years</i>	<i>35-64 years</i>	<i>65 years &amp; over</i>	<i>All ages</i>	<i>Under 35 years</i>	<i>35-64 years</i>	<i>65 years &amp; over</i>	<i>All ages</i>
	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
Accident — M.V.	40	3	1	7	37	2	2	11
Accident — other	18	3	1	4	5	11	2	8
Cardiovascular	10	56	68	54	19	42	73	43
— renal diseases								
Cancer	12	26	15	21	14	30	14	22
Suicide	7	3	—	3	2	5	—	3
Other	13	9	15	11	23	10	9	13
All causes	100	100	100	100	100	100	100	100

## ROYAL AUSTRALASIAN COLLEGE OF SURGEONS, ROAD TRAUMA COMMITTEE: SOURCES AND TECHNIQUES OF DATA COLLECTION USED IN PATTERN OF INJURIES SURVEY

The Road Trauma Committee (Royal Australasian College of Surgeons) also recommended a central organisation for collection and analysis of road safety data to ensure compatibility between States' records because at present it is not possible to obtain even elementary injury/accident information for Australia as a whole. They described the current information collection situation as follows:

*Police* collect information of use to legal and road authorities;

*Insurance companies* collect information of legal and financial importance to them;

*Hospitals* record a count of traffic injuries for claims on cost of treatment;

*Ambulance organisations* collect information for administration;

*Vehicle registration organisations* keep records of vehicle identification for legal, administration and legislation enforcement; and

*Car manufacturers* code and record specifications of materials and parts.

All of these possess some information but there is no attempt at uniformity and compatibility and few cases where records are accessible one to another or to those evaluating factors on the road toll. Research is confined to isolated sample studies of amateur or private groups.

The Road Trauma Committee described the data sources of their Victorian collection mechanism as follows:

*Hospitals:* reports are made in Victoria under Health Department Regulations to overcome legal and ethical difficulties (some incentives may be needed to ensure completion by doctors);

*Coroners:* reports are available, as post mortems are performed on a majority of fatalities and are available on a voluntary basis to the R.A.C.S. with the co-operation of the Crown Law Department;

*Ambulance:* R.A.C.S. has established a collection system of injury data on a voluntary basis, but it is not working completely and needs statutory backing;

*Tow Trucks:* R.A.C.S. collected some data on a goodwill basis but collection is unsatisfactory and may need a reward for reporting or conditional payment for work done and form completed;

*Police:* accident report form, but this suffers from the following defects:

- (i) form often completed remote from time of accident;
- (ii) processing delays because of manual coding and storage; and
- (iii) data needs pre-computer treatment to allow proper usage;

*Insurance:* R.A.C.S. collected data on a goodwill voluntary basis from major companies in Victoria, which enclosed with their widely varying property damage claim forms a separate form from R.A.C.S. for voluntary completions; there is a need to standardise insurance claim forms and include information of value to safety authorities (third party claim forms, if compatible and accessible, would contribute enormously to information);

*Vehicle registration:* vital information on vehicle identification, driver record, mechanical safety checks, vehicle mileage and manufacturers' identification codes of design features would be fairly readily accessible.

As an example of a mass data collection mechanism, it was suggested that in Victoria the Road Safety and Traffic Authority (RoSTA) would be the instrument which could establish a statistical section with: an experienced chairman, an executive of full- or part-time experts from various fields; a panel of senior representatives from Police, Health, Hospitals, Chief Secretary's, V.A.C.C., Manufacturers, Transport Regulation, Vehicle Registration, Crown Law, Ambulance; a legal advisor; and a full-time management structure from medical, engineering, statistical and computer fields to manage adequate personnel and equipment. The Road Trauma Committee suggested that Victorian and other

State mechanisms could be developed by the Bureau of Census and Statistics which would have the authority and capability to set up the national collection agencies.

The data collection and integration network being established by the Road Trauma Committee is an example of how the statistical arm of a national road safety authority could develop a national data base with the assistance of the Bureau of Census and Statistics. If a national authority had close ties with State collection agencies, for example through its servicing of A.T.A.C. committees, this together with the operating of the Bureau at State level, would facilitate co-operation in establishing State-wide data collection and integration mechanisms.

R13/694