06.055.5 TA.82/83

INHEFIC AUTHORITY

OF NEW SOUTH WALES



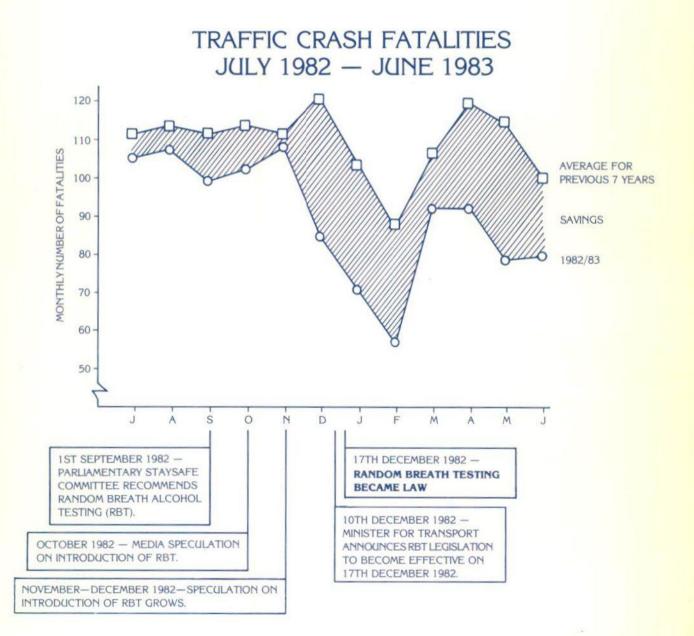
ANNUAL REPORT 1982 - 1983

#### FRONT COVER

Roundabouts are becoming increasingly familiar to New South Wales motorists. At the end of the year, 56 had been installed throughout the State. The photographs show examples of some styles of recently constructed roundabouts.

#### RANDOM BREATH TESTING

Since the introduction of RBT, on 17th December 1982 traffic crash fatalities have fallen, dramatically. The graph below illustrates the situation to the end of June 1983. More details about random breath testing are given later in the report.







## Traffic Authority of New South Wales

Rosebery Lentie
Primitise Avenue Rosebery
Bit 110 P.O. Rosebery 2018

The Between

Telephone 563.8227

The Hon. P. F. Cox, M.P., F.C.I.T., Minister for Transport, Parliament House, SYDNEY.

Dear Mr. Cox.

It is with pleasure that I present the Annual Report of the Traffic Authority of New South Wales for the year ended 30th June, 1983.

In so doing I should first like to extend my congratulations to the Joint Parliamentary Committee on Road Safety whose work formed the foundation for the Government's introduction of the Random Breath Alcohol Testing Legislation for motorists.

The result of that Legislation has been profound in that it has not only led to a reduction in the number of alcohol affected motorists on the roads and hence, road deaths and injury, but also has brought about a greater public awareness of the preventability of traffic crashes by other means. Together with further reducing the incidence of drink driving, it is those other means of preventing traffic crashes and, of course, their attendant casualties with which the Authority is concerned.

This report describes the Authority's activities in that respect. It also describes the responsibilities and functions of the Authority and outlines some future plans and programmes.

I would like to take this opportunity of recording my appreciation of the loyal and able contribution to the work of the Authority by the staff of the Authority's Secretariat and by officers of other Departments and organisations. Their efforts have greatly assisted in the achievement of the Authority's objectives this year.

Yours faithfully,

Chairman.



1



## Members of the Traffic Authority at 30th June 1983

Official Members

J.W. DAVIES, I.S.O., O.St.J., B.Ec., F.C.I.T., Commissioner for Motor Transport, N.S.W.,

Chairman.

C.R. ABBOTT, Q.P.M.,

Commissioner of Police, N.S.W.

B.N. LODER, B.E., M.I.E., Aust, Dip. T.C.P., Commissioner for Main Roads, N.S.W.

R.B. SMYTH, B.Sc., (Econ.) Hons. (London) Dip. T.P. (Auckland) M.R..P.I., M.I.E., Aust.,

M.I.C.E. (London).

Director.

Department of Environment and Planning, N.S.W.

K. EDGAR, B.E., M.I.E. Aust., F.C.I.T.,

Managing Director, Urban Transit Authority.

Appointed Members

A. REEVES.

Alderman. Council of the City of Sydney.

R.T. GOSLING, M.B.E., (Deceased 12th Aug. 1982)

Ald, Mrs. P.A. GOULD.

(appointed 19th November, 1982)

Nominee of the Local Government and Shires

Associations of N.S.W.

H.F. QUINN.

Assistant State Secretary,

Transport Workers' Union of Australia.

(N.S.W. Branch).

G.F. MESSITER B.Sc., (Tech), M. Eng. Sc.,

M.I.E. Aust.

Assistant Secretary (Traffic & Planning)

Ministry of Transport, N.S.W.

Appointment Pending

Mr. R. Saunders,

Executive Director N.S.W. Road Transport

Association,

Advisor

Professor R.L. Huckstep, C.M.G., M.A., M.D., F.R.C.S., F.R.A.C.S., F.T.S.,

University of N.S.W. - Ministry of Health

Advisor.

## **Principal Officers Traffic Authority Secretariat**

Director and Deputy

H.L. CAMKIN, B.E., Dip. T. & C.P.,

Chairman

M.I.E. Aust, F.C.I.T.

**Principal Assistant** 

Director

B.J. HAZEL, B.E., M.S.C.E., M.I.E. Aust. M.I.T.E.

Special Consultant

D.C. HERBERT, B.Sc., (Eng.), M.I.E. Aust.

on Traffic Safety Secretary

W.A. Levitt, F.A.S.A., F.C.I.T.

# Contents



Introductory Pages	
The Authority's Charter	5
Aims and Objectives	5
Management and Organisation	6
Strategic Plan	10
Review of Operations and Achievements	10
Financial Statement	23
Ongoing Programmes	26
Research and Development	32
Legislation	35
Public Relations and Participation	38
Directory	40
Appendices	41

ISSN-0314-336X











ABOVE (From Left to Right)

#### MEMBERS OF THE TRAFFIC AUTHORITY AND DELEGATES.

Mr. J.W. Davies, Chairman Traffic Authority and Commissioner for Motor Transport (member), Mr. B.N. Loder, Commissioner for Main Roads (member), Mr. R.M. Holloway, Assistant Commissioner of Police (Traffic) (Delegate), Mr. G.F. Messiter, Assistant Secretary (Traffic and Planning) Ministry of Transport (Member) Alderman J. Calpis, Council of the City of Sydney (Delegate), Mr. R. Saunders, Executive Director, N.S.W. Road Transport Association (Appointment as Member pending), Professor R.L. Huckstep, University of New South Wales/Ministry of Health (Advisor), Mr. H.F. Quinn, Assistant State Secretary, Transport Workers Union of Australia (New South Wales Branch) (Member), Mr. J.R. Caldwell, Manager, Transport Branch, Department of Environment (Delegate), Mr. R. Forbes, Chief General Manager, Bus Services, Urban Transit Authority (Delegate), Mr. H.L. Camkin, Director and Deputy Chairman, Traffic Authority, Mr. W.A. Levitt, Secretary, Traffic Authority.

#### INSETS (Top to bottom)

Alderman, Mrs. P.A. Gould, Local Government and Shires Associations of New South Wales (member), Mr. R.B. Smyth, Director, Department of Environment and Planning (Member), Mr. K. Edgar, Managing Director, Urban Transit Authority (Member).

#### VALE. Ronald Thornycroft GOSLING, M.B.E.

Mr. Ron Gosling M.B.E. who died on 12th August, 1982 had a long and distinguished career in Local Government.

Ron was appointed to the Traffic Authority as the nominee of the Local Government and Shires Association of N.S.W.

In 1968 Ron Gosling was awarded the order of Member of the British Empire for his contribution to Local Government. His Local Government service began in 1941 as an alderman of Bexley Municipal Council. When Bexley Council amalgamated with Rockdale in 1948 he became an alderman of the newly constituted Rockdale Municipal Council. His terms of office spanned 36 years including six occasions as mayor of the Municipality. He also served a record term of eight years as chairman of the St.George County Council. He retired from the Council in 1977. During his career, Ron served 10 years on the Executive Committee of the Local Government and Shires Associations of N.S.W.

In 1979, following Ron Gosling's nomination by his Association, the Minister for Transport appointed him as a Member of the Traffic Authority. For the Authority it was a welcome appointment. Ron brought to the Authority his wealth of Local Government experience from which he provided the Authority with valuable information and advice. Ron Gosling's passing leaves the Authority that much poorer. He will be missed.

# AUJIHO RITY

# The Authority's Charter

The Traffic Authority of New South Wales is a statutory corporation empowered to act as the State Government agency responsible for traffic safety and traffic management measures. The Authority is constituted under the Traffic Authority Act, 1976 and comprises five official members and four appointed members.

Before the Traffic Authority was established on 1 st June, 1976, five Government Departments and a large number of Municipal and Shire Councils worked independently of each other in road traffic matters. There was little co-ordination of policies, local interests overlapped and duplication of effort was inevitable. Although various committees existed to co-ordinate some activities, for the want of specific statutory powers member organisations were not bound by committee decisions.

The need for a management approach to transport planning was recognised in the mid-1970's along with the need for a unified approach to meet traffic related problems. Thus, with the passage of the Traffic Authority Act in 1976, a single decision-making statutory authority was established which assumed full responsibility for road traffic control in New South Wales. The legislation under which the Authority operates is listed in Appendix 1.

# Aims and Objectives

The Traffic Authority Act 1976, requires the Authority to review traffic arrangements in the State with the object of improving them. In effect, the Act requires the Authority to set policies, standards and priorities for implementing improved traffic measures and charges it with the responsibility for promoting traffic safety generally. To enable the Authority to be effective in that respect it is responsible, under the Act, for directing and co-ordinating the activities of other public authorities involved with traffic related matters in their day-to-day work.

In the exercise of its responsibilities the Authority works toward the general objective of promoting safety and efficiency in the use of the State's roads, having regard to traffic, social and environmental interests.

It also works toward providing an administrative system for the monitoring and management of road traffic matters which is responsive to community needs, changing social attitudes and values, as well as innovations in technology.

Within the framework of its general objectives the Authority's major objective provides an ongoing commitment to the establishment of general standards, principles and priorities for the implementation of traffic safety and traffic management measures.

Current activities and research ranging from measures to reduce the incidence of traffic crashes and attendant casualties to schemes for improving vehicle journey times include:

- the identification of and means to better identify traffic accident "black spot" locations so that remedial measures may be applied.
- the establishment of a road hierarchy for Sydney's Metropolitan area to provide a better and safer interaction of traffic.
- the removal of roadside poles and trees where located in potentially dangerous situations.
- improvement to arterial road traffic flows by the application of better traffic signal timing and other traffic management techniques.
- the restoration of amenity to residential suburbs by the diversion of traffic away from such areas.



- the application of preferential treatments for high occupancy vehicles for the convenience of their passengers and to reduce overall traffic volume.
- the reduction of fuel consumption by the application of traffic management procedures.
- the delegation and decentralisation of local level operational traffic management measures to Local Government Authorities, and on those of regional significance to the Department of Main Roads.

# Management and Organisation

The Traffic Authority Act 1976 directs that membership of the Authority include as official members the Commissioner for Motor Transport, the Commissioner for Main Roads, the Commissioner of Police, the Director of the Department of Environment and Planning and the Managing Director of the Urban Transit Authority. Official members of the Authority remain so for the duration of their tenure of office as the permanent head of their respective Departments.

The Act also requires four other members to be appointed by the Minister for Transport for terms of three years. The appointed members are a member or officer of the Council of the City of Sydney, a person appointed by the Minister on the joint nomination of the Local Government Association of New South Wales and the Shires Association of New South Wales, a person appointed by the Minister on the nomination of the Executive Committee of the Transport Worker's Union of Australia (New South Wales Branch) and a person appointed by the Minister as his personal representative.

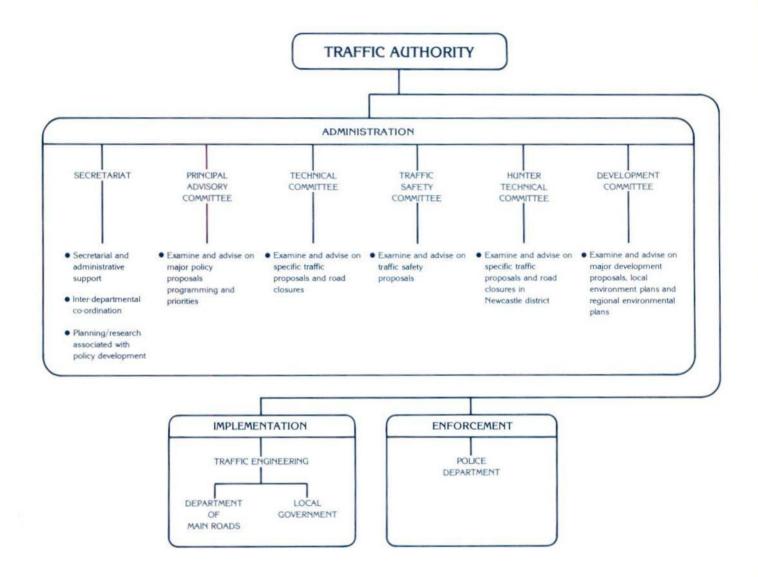
Appointed members are appointed for a term of three years and are eligible for reappointed at the end of their terms.

On the Minister's proposal a representative of the New South Wales Road Transport Association participates in the Authority's proceedings pending the passage of necessary legislation. Also, a representative of the Minister for Health attends Traffic Authority meetings in an advisory capacity.

During the year under review the Traffic Authority met on 12 occasions.

The following chart shows the organisation and functional responsibilities of the Authority.





## Resources



In carrying out its responsibilities the Authority has available to it the facilities and staff of its member organisations and other bodies.

The Department of Main Roads is the Authority's principal operations and construction agency. In accordance with the Authority's policies priorities and programmes, it has delegated to the Commissioner for Main Roads the power to authorise traffic facility devices on any public road throughout the State. These powers are exercised by the Department's Divisional Engineers.

The Department of Motor Transport provides staff, accommodation and services for the Authority's Secretariat. It acts in a consultative capacity on legislative and regulatory matters when the Authority considers changes to traffic laws.

The Police Department. All decisions on traffic control must have regard to both the need for and the practicality of law enforcement. In this regard the Commissioner of Police has responsibility for the enforcement of traffic laws and regulations.

The Local Government Authorities. The Traffic Authority has delegated to Councils the power to authorise minor traffic facilities on local roads (other than main and secondary roads). It has also delegated powers to Councils to consent to the closure of local roads where this is seen to be in the public interest.

The Traffic Authority Secretariat. The Authority maintains a Secretariat which provides technical advice, conducts research and gives administrative support. The Secretariat is provided by the Traffic Authority's Chairman from the Staff of the Department of Motor Transport, of which he is Commissioner. Staff of the Secretariat comprise administrative, scientific and technical officers with wide experience in the areas of traffic planning and safety.

The Secretariat comprises:

- an Administrative Unit providing management services to the Authority.
- a Policy Development Unit giving technical service to the areas of policy development and programme implementation.
- a Traffic Accident Research Unit which supplies research based advice on traffic matters.
   It provides a data base of crash details, conducts research into traffic safety matters, develops traffic safety information programmes and provides traffic crash statistics.
- an Information Unit which provides resource information to the Authority's planning, technical and research areas from the technical library it maintains. The Unit also provides traffic safety information to the public and assists other organisations producting traffic safety material.
- a Public Relations Unit which promotes the Authority's viewpoint and decisions on traffic matters.

For administrative purposes the Secretariat is a Branch of the Department of Motor Transport. Consequently, personnel practices, staffing arrangements and industrial relations practices are the same as for officers of that Department.

The Authority meets regularly in committee to determine policies, priorities and programmes. It deals with matters submitted through its supporting committee structure, its Secretariat, and by member organisations and with matters referred directly to it by organisations and the public.

To assist in its deliberation the Authority maintains a number of permanent committees as follows:

A Principal Advisory Committee provides the major input to the Traffic Authority by way of advice and recommendations on matters such as policy, corporate planning, objectives and work programmes. Also the Committee considers and makes recommendations on a wide range of matters prior to consideration by the Traffic Authority. The Committee broadly oversights the activities of the Development, Technical and Traffic Safety Committees. Ten meetings were conducted during the year.



The Traffic Safety Committee provides a forum for discussion on the many facets of traffic safety, and provides a means of co-ordinating traffic safety related activities of the Health, Education and Judicial Authorities with those of Transport, Roads and Police administrations.

During the year, in consequence of internal changes within the Department of Health, the Authority accepted a proposal by the Department that it not be represented on the Committee on a full-time basis, but that officers of the Drug and Alcohol Services Division and the Accident and Emergency Services Division be appointed to liaise with and attend meetings of the Committee whenever matters involving the Department of Health are under consideration. Eight meetings were conducted during the year.

The Technical Committee advises and assists the Authority on the implementation of major traffic management schemes, policy changes, regulatory changes, examination of various matters in respect of operation and safety and adjudicates on appeal cases where agreement cannot be reached at the local traffic committee level. Fifteen meetings were conducted during the year.

The Development Committee is a Standing Committee of the Traffic Authority and under the Traffic Authority Act has delegated powers. The line of communication is between the Development Committee and the Principal Advisory Committee which might request reports etc., on any matter and which also deals with contentious matters referred to it.

The Committee gives advice to Consent Authorities (generally Councils) in respect of land and building development proposals of a traffic generating nature. Generally, only matters of a major nature are referred to the Development Committee for comment, whilst minor matters are dealt with by Council's Local Traffic Committee.

The Committee also considers parking station proposals, for which the Local Government Act requires Councils to obtain the concurrence of the Traffic Authority. Twenty four meetings were conducted during the year.

Apppendix 3 gives the types and response times for applications to the Committee.

The composition of the foregoing Committees is shown in Appendix 2.

# J. J. J. WORLEY

# Strategic Plan

In order to achieve its objectives, the Traffic Authority has implemented the following strategy:

- (i) Research in order to develop policies, standards and guidelines etc., research into various aspects of traffic is undertaken by the Secretariat, other organisations, Inter-departmental committees and consultants.
- (ii) Development of Policies, Standards, Guidelines and Statutes where initiatives are undertaken in respect of traffic matters, the co-operation and co-ordination of many separate organisations is required. To this end, the Traffic Authority has established a number of committees which address specific areas of the authority's operation viz, development proposals of a traffic generating nature, traffic proposals and traffic safety matters, in the light of community needs, social attitudes and current technology. Such determination of policies etc., ensures, amongst other things, consistency of standards and treatment throughout the State in respect of powers delegated by the Authority to other organisations. Additionally, the Traffic Authority Secretariat provides secretarial, administrative and technical support to the Authority and its committees and is responsible for promotional activities in the areas of traffic safety and management.
- (iii) Implementation The implementation of traffic management and safety improvement measures has been delegated to the Department of Main Roads with respect to classified main roads and secondary roads throughout the State and to Councils in respect of local roads. Such traffic management measures are consistent with Traffic Authority policies or guidelines and additionally, require input from the Police Department which is responsible for the enforcement of traffic laws and regulations.
- (iv) Monitoring and Review of Performance To ensure that initiatives in respect of traffic management and safety operate efficiently and as planned, such initiatives are monitored, evaluated and reviewed as necessary.

# Review of operations and achievements

As in previous years, the functions of other organisations this year led to the Authority's involvement in a variety of activities.

How the Authority assisted in those activities and how it performed in the areas of its own responsibilities and objectives is reviewed under the various headings which follow.



## Staysafe

On 17th December, 1982 the Government introduced random breath alcohol testing for motorists in New South Wales. The Government's decision in this respect followed a recommendation that it should do so by the Parliament's Joint Standing Committee on Road Safety (for brevity the "Staysafe" Committee). The "Staysafe" Committee is the first Joint Parliamentary Standing Committee established to investigate and report on road safety as an on-going task. Its initial enquiries were directed towards the use of alcohol and other drugs by motorists. The Committee's first report entitled "Alcohol, Other Drugs and Road Safety" was presented to the Government on 30th September, 1982.

While the Authority was not involved in the day-by-day activities of "Staysafe", it provided an extensive range of statistical data, analyses and other information for the Committee's consideration on an ad hoc basis. Also, as mentioned in the Authority's Annual Report for 1981-1982, Mr. D.C. Herbert (Special Consultant on Traffic Safety) was made available by the Authority to assist the "Staysafe" Committee. During the year under review Mr. Herbert maintained a close association with the Committee by attending, at its invitation, all meetings, inspections and hearings.

Mr. Herbert's role of advisor to "Staysafe" is continuing as the Committee pursues its enquiries in addressing other aspects of traffic safety.

The Traffic Authority's Traffic Accident Research Unit is continuing its association with the "Staysafe" Committee in providing it with information and statistical data.

## Random Breath Testing

The Authority's Traffic Accident Research Unit at the first public hearing of the "Staysafe" Committee presented figures which showed that alcohol in the blood was still the most significant human factor in causing fatal traffic crashes. The figures showed that among 540 dead drivers and motorcyclists tested at autopsy, some 261 (48%) had alcohol in the blood. Two hundred and twenty four of those had illegal concentrations.

The Committee was made aware that in spite of very large numbers of roadside breath tests conducted over the 15 years of drink-driving legislation there had been no appreciable reduction in drink driving.

That situation set the scene for further public hearings and submissions to "Staysafe" and for its first report to Parliament which recommended the introduction of random breath testing.

Public interest in the measure was high through media reporting of the "Staysafe" proceedings and heightened further following release of the Committee's report in September 1982.

Just prior to the legislation becoming effective the Minister for Transport launched a statewide media campaign designed to ensure widespread public awareness of the machinery, penalties and the purpose of random breath testing.

The constant theme of the advertising was "How will you go when you sit for the test? - Will you be under .05 or under arrest."

The theme was developed to draw attention to and stimulate interest in the random breath test issue and to heighten the perceived risk of apprehension.



The introductory phase of the campaign preceded the Government effecting the necessary Legislation for random breath testing which became law at 12.01 a.m. on Friday, 17th December, 1982 for a three year trial period. Extensive all-media advertising continued through the Christmas/New Year period and in the early months of 1983.

The Traffic Authority funded all advertising in respect of the random breath testing campaign, as it did the N.S.W. component of a national television campaign designed to encourage others not to allow alcohol affected motorists to drive. The television advertisements utilised the theme "What kind of a friend are you?". The national release of that campaign was arranged to supplement and reinforce the random breath testing campaign in New South Wales.

At the end of June 1983 traffic fatalities in N.S.W. were down by around 31% compared to the rest of Australia. While 10% to 12% of the reduction in N.S.W. may have been caused by reduced exposure to crash risk brought about by drought and other factors curtailing travel, the rest of the improvement to 31% can generally be attributed to the effects of the random breath testing Legislation.

To the end of June 1983 road deaths in N.S.W. were 467 as against 653 for the first half of 1982 - a reduction of 186.

As may be seen from the following graph there has been a marked reduction in traffic accident fatalities since the introduction of random breath testing in the 3rd week of December 1982.

The Traffic Authority in conjunction with the Bureau of Crime Statistics and Research is monitoring and evaluating the effectiveness of the random breath testing Legislation. The study will determine financial and other implications affecting the community and Government which may arise from random breath testing.







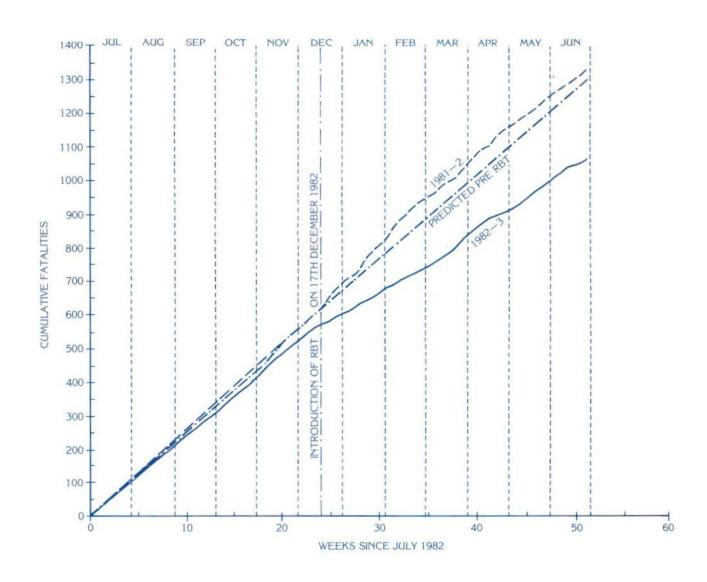


The pictures above are excerpts from television commercials funded by the Traffic Authority on the introduction of random breath testing. The campaign designed to ensure an awareness of the random breath testing measures. (Photographs, courtesy of John Bevins Pty., Ltd.).





## CUMULATIVE WEEKLY FATALITIES JULY 1982 TO JUNE 1983





### The Road Toll

During the year under review there were 955 fatal traffic crashes in N.S.W. which resulted in 1,068 persons being killed. This is down from the "expected" (trend) figure of 1,298 for 1982/3 and the "abnormally" high actual toll of 1,335 killed last year. The reduction has been noticeable since Random Breath Testing was introduced on 17th December 1982.

The high risk period for fatal crashes on weekdays was between the hours of 3 p.m. and 12 midnight when over half the fatal crashes occurred. About one in three fatal crashes on weekends took place between the hours of 9 p.m. and 3. a.m. on Saturdays and Sundays. Those statistics strengthen independent research concerning the danger of "social driving" and emphasise a link between late-night, weekend and alcohol-related crashes. More detail is given in Appendix 7, Table 1.

In terms of vulnerability, drivers of motor vehicles accounted for more than one-third of the 1068 fatalities. The most common age groups persons killed were those aged 17 to 20 years and 21 to 24 years. Together those two groups accounted for one-third of all fatalities. Motorcyclists in these groups were particularly over-represented with about 60% of all motorcyclists killed being aged between 17 and 24 years. Pedestrians accounted for 20% of fatalities and were most common among the three to seven year olds and those aged 60 and over. Almost one half of pedestrian fatalities were aged 60 and over. (Appendix 7, Table 2).

These figures substantiate various research findings which show that young male drivers and motorcycle riders are relatively high risk road users, as are the very young and elderly pedestrians.

Trends in the number of fatalities (see Apendix 6) have shown a more or less steady rise over the last 20 years. This is consistent with a continuing rise in the population of the State, numbers of licenses on issue and vehicles registered. However, over the past 20 years the fatality rate has fallen from eight to four fatalities per ten thousand vehicles registered.

A comprehensive statistical statement of road traffic crashes in N.S.W. is available on request.

## Local Area Traffic Management

The Authority has long been concerned about the environmental and safety problems arising from increases in through-traffic using what were once quiet residential streets as short-cuts.

In the past, efforts to meet the problem in its varying degrees of severity ranged from the installation of traffic signs to street closures in extreme cases. Those measures were applied on a random basis at particular locations. While the measures eased difficulties at those sites it was found that problems often were compounded within adjacent areas.

Given that experience, attention has now focussed on a systematic traffic management approach to an entire residential precinct or neighbourhood.



Drawing from both Australian and overseas practices the Authority has prepared comprehensive guidelines on the planning and implementation of local area traffic management schemes. The guidelines describe a procedure for the development of area wide schemes and provide design information on a range of traffic management devices including "slow points", speed humps and mini-roundabouts. The guidelines stress the need to consult with the public from scheme inception to implementation. It is hoped that the guidelines will both encourage and assist Councils and their Traffic Committees to initiate soundly based schemes which embody community aspirations and regional traffic objectives. The guidelines have been issued to all Councils.

Leaflets describing the objective of the schemes have also been produced for public distribution.

At the instigation of the Authority, Canterbury and Willoughby Municipal Councils are preparing plans for trials of local area traffic management schemes which have been developed generally in accordance with the Authority's guidelines. The trial schemes will be carefully monitored to determine their effectiveness in traffic management terms and assess whether these types of schemes are acceptable to the community. The feedback will also be used to further develop local area traffic management philosophies and practices.

#### Roundabouts

The use of roundabouts as a traffic control device, particularly on local roads is gaining wide acceptance. As at June 1983 a total of 56 roundabouts had been installed throughout the State and many more are planned.

Experience in both New South Wales and other States has clearly demonstrated that roundabouts often have distinct advantages over traffic signals and other forms of intersection control. For example roundabouts:

- are easy to install and have very low maintenance costs;
- improve traffic discipline and hence overall safety at intersections;
- increase intersection capacity over conventional methods by as much as 30%;
- help to reduce traffic speeds in residential areas when installed in series; and
- cause fewer delays to motorists in off-peak periods.

During the year the Traffic Authority produced and distributed leaflets and posters describing safe use of roundabouts.



## Traffic Works for Sydney's Entertainment Centre.

Sydney's Entertainment Centre was opened on the 1st May, 1983. Sited in Haymarket on the western perimeter of Sydney's Central Business District, the centre can accommodate up to 12,000 people.

To make provision for crowds of this magnitude visiting the Centre the Traffic Authority allocated over \$1 million from its Traffic Facilities Fund for traffic and pedestrian improvements in the Haymarket area. Measures included minor roadworks, intersection widening and improvements to traffic control, the construction of a pedestrian bridge over Harbour Street, the widening of footpaths in Harbour, Hay and Thomas Streets and the provision of parking facilities for chartered buses conveying patrons to the Centre.

Apart from some initial minor parking problems associated with unusually large crowds attracted by the centre's opening, the measures instituted have proved satisfactory in accommodating the additional vehicular and pedestrian traffic.

## Advisory Committee on Road Safety Education

In recognising that the habits and attitudes gained by children in their formative years can have a great influence on later behaviour, a need was seen by the Authority to further develop resources for road safety education in schools to better equip children as future road users.

In collaboration with the Department of Education the Authority funded the establishment within the Department of a Road Safety Education Committee. The Committee's work is co-ordinated by a full-time executive officer from the Department and represents a wide range of community and government interests. Its aim is to advise the Department on needs, priorities, and the development of resources for road safety education.

## Joint Working Party on Heavy Vehicle Safety

A review by the Traffic Authority of the involvement of heavy vehicles in serious crashes on N.S.W. roads led the Minister for Transport to invite representatives of appropriate sectors of the road transport industry to join with officers of relevant government instrumentalities in an analysis of current trends and factors relating to them. The committee, known as the Joint Working Party on Heavy Vehicles, was asked to investigate.

"The extent and nature of the road safety problem so far as heavy vehicles are concerned, with a view to making joint recommendations to government, the industry and the unions".

Following extensive enquiries which included a review of specially commissioned studies the joint working party presented its report to the Minister for Transport in 1982.



In order to progress many of the report's findings without duplicating work already underway by the N.S.W. Road Freight Transport Industry Council, and to give that organisation access to resources and expertise not immediately available to it, the Traffic Authority is now represented on the Council at Directorate level. The council advises the Ministers for Transport and Industrial Relations on all matters relating to the freight industry.

It is expected that the proposed Federal Inquiry into the Road Transport Industry will benefit from the investigations in N.S.W. undertaken by the Joint Working Party on Heavy Vehicle Safety.

## Forum of Road Safety Committees

Early in 1982 mention was made at a meeting of the Traffic Authority that an increasing number of road safety and similar committees were being established either independently or by various organisations having an interest in road safety generally or in a particular aspect of road safety.

The Authority was concerned that many of these groups were working in isolation and in many cases appeared to be duplicating much of the work already being carried out by others.

To establish a formal liaison and to stimulate collaboration, co-ordination and an exchange of ideas, arrangements were made to set up the Forum. It is not a Standing Committee of the Authority but serves as a very valuable inter-face with professional and other community interest groups.

The Forum, the membership of which has been expanded in the past 12 months to make its composition more comprehensive, is shown in appendix 4.

## Traffic Crash Data Coding

Following a review to improve the system for recording traffic crash data, which involves the coding of vast amounts of information from police traffic crash reports to a computer-acceptable form, the Australian Quadriplegic Association has been engaged to carry out the bulk of coding work for the Authority.

The arrangement has been of mutual benefit to both organisations in freeing staff of the Authority for other work and in providing suitable employment opportunities for quadriplegics generally.

A further review of the data recording system is proceeding with the intent of streamlining the entire system so as to better serve users of the crash statistics.



## Cycle Safety

Following the success of the initial three year bicycle funding programme (1979/82) the State Government continued this financial year to provide \$350,000 p.a. These funds were available as in the previous programme on a dollar for dollar basis to Local Councils to encourage funding of bicycle engineering facilities and bicycle transport studies. Funds were also available for use in bicycle education, enforcement and encouragement programmes. The Authority makes available to Councils, on request, advice on the planning and engineering aspects of cycleways.

This year the Traffic Authority produced two bicycle guideline documents for use by Local Councils. The first document "Planning for the Bicycle" (July 1982) provides a method for planning a cycleway network for an existing urban region. It also provides guidance for incorporating cycleways within local area traffic management proposals to maximise the benefits of improving residential street traffic.

The second document "Designing for the Bicycle" (February 1983) contains engineering design guidelines for bicycle facilities. It includes advice concerning both on-road and off-road bicycle facilities, linemarking and signposting of facilities, and highlights the need for bicycle storage facilities.

The Authority produced three bicycle safety booklets for the State Bicycle Advisory Committee Education programme. The booklets were designed for three distinct target groups: parents of young children; primary school children; and teenagers and adults. The booklets called "Spike's Bike Books", discuss road regulations applicable to cyclists, and hazards to bicycle safety and recommend countermeasures, the need for cyclist conspicuity, bicycle safety equipment, and maintenance. The booklets are profusely illustrated and include drawings and comment by Spike Milligan the internationally acclaimed humorist. The booklets have proved immensely popular with the target groups and will be reprinted.





The Newcastle Area Bikeplan Report, prepared by the Authority was released in 1981 and funding for the implementation of the recommended integrated bicycle transport plan has commenced. In June 1983 the Minister for Transport, Mr P.F. Cox, officially opened the first major cycleway in the Newcastle Area, a 5km long route from the city centre to the Newcastle University. At the same time the Minister launched the bicycle safety booklets "Spike's Bike Books", and announced a pilot police bicycle enforcement scheme, whereby a Newcastle Police Officer will trial various bicycle enforcement procedures in the Newcastle area.

During the year, a bicycle safety education programme continued to be taught in over 50 primary schools in the Newcastle area, and in the 1983/84 year more Newcastle children will be involved in the course. The course will also be taught in Wollongong and be extended to other regions in New South Wales.

## Works Programmes

The Traffic Authority in exercising its responsibilities has established a corporate plan outlining its goals and objectives. This plan was further developed during the past year to outline in greater detail the Authority's specific objectives, both continuing and short term.

The corporate plan forms the basis upon which the Authority's annual programme of works is developed. In particular the specific short term objectives provide a direct link to the structure of the programme. The short term objectives, being specific and unambiguous, ensure that the Authority's intentions are clearly understood and funds are directed according to the priorities established by the Authority.

Works are financed from the Traffic Facilities fund, details of which are itemised later in the report.

The Department of Main Roads handles day-to-day operational traffic matters on the Authority's behalf and has been delegated the task of administering the annual works programme. Using the corporate policy as indicated the Department prepares a detailed annual programme of works for the Authority's concurrence and implements the approved works using direct control forces, contractors and Council resources as appropriate.

The Authority is particularly indebted to the Department of Main Roads and its officers for the successful completion of these programmes and for the maintenance and operation of traffic facilities throughout the state. The scale of the Authority's programme and the Department's activities may be judged by the statistics given in Appendix 5 of this report. The works undertaken are diverse and range from the provision of widened highway shoulders in remote areas of the State for school bus stops to the implementation of sophisticated traffic management schemes for the central business district of Sydney, and traffic signal control using on-line computers, closed circuit television traffic surveillance, computer graphics and helicopter based control during train strikes.

Requests for traffic facility works far outstrips the Authority's ability to provide adequate funds. The works programme is therefore prepared with particular care to ensure that only those most deserving works are included.



First priority is given to maintaining the facilities the Authority has already provided. Department of Main Roads staff undertook all routine maintenance and emergency repair work of traffic facilities including traffic signals in the Sydney, Wollongong and Newcastle areas. In other areas, signal maintenance was carried out by the local electricity supply authority for the Authority while maintenance of other traffic facilities was undertaken by Departmental forces or by the Local Council as mutually convenient.

The Department of Main Roads re-marked approximately 67,000 km of longitudinal traffic lines on classified roads. Raised pavement markers continued to be used to augment painted lines and to simulate traffic lines on freeways. Approximately 175,000 square metres of transverse lines, zebra crossings and road symbols were marked or re-marked during the year. Paint continues to be used for the bulk of pavement marking. However, hot applied thermoplastic material is now commonly used for transverse markings on heavily trafficked roads and self-adhesive marking tape is used for special applications.

About 27,000 replacement signs were provided during the year. The installation and maintenance work on regulatory signs in the Sydney, Newcastle and Wollongong areas is carried out by Department of Main Roads staff and in other areas the work is performed by the Department or Council depending upon local arrangements.

Funds remaining after maintenance needs have been met are devoted to new works according to the Authority's priorities and in a manner which firstly ensures an equitable spread of works across the State and, secondly, complies with fiscal restraints for the application of certain funds to specific areas. Within these parameters works are selected which have the potential to provide the highest benefit to cost ratio.

The construction programme can be conveniently divided into seven sections as follows.

#### Safety at Schools

Arising from a research project completed in 1979 the Authority gives a high priority to improving safety for children in the vicinity of schools. Works carried out include zebra crossings, warning signs alerting drivers to the presence of children and parking restrictions to improve visibility. In addition to these numerous minor works new pedestrian actuated traffic control signals have been provided together with one pedestrian refuge in the immediate vicinity of schools.

#### Pedestrian Safety Improvements

For many years pedestrians have constituted between 20 and 30 percent of the overall road fatalities across the State. A high priority is therefore given to improving pedestrian safety wherever practical. During the year pedestrian overbridges were completed at Leura over the Great Western Highway and over Harbour Street adjacent to the Sydney Entertainment Centre. Four mid-block signals were installed specifically for pedestrian use, whilst pedestrian facilities were incorporated in the majority of new or reconstructed intersection traffic signals.

Audio tactile devices to assist those with sight and hearing disabilities were installed at 83 locations following consultation with the Royal Blind Association.

#### Intersection Improvements

Intersection improvements are important firstly on safety grounds as 40% of all traffic accidents occur at intersections and secondly because the traffic carrying capacity of the State's road network is governed essentially by intersection capacity.

During the year 64 new sets of intersection traffic signals were brought into service and 40 sets of intersection traffic signals were reconstructed to improve safety and capacity. In addition 35 roundabouts have been constructed together with 37 intersection channelisations.



Accident "blackspot" data provided by the Authority's Traffic Accident Research Unit was used extensively in assessing the priority of works. The Authority is directing a particular effort toward reducing hazards at accident "blackspots" and is achieving gratifying improvements in this area. Appendix 5 indicates the value of works undertaken in regard to the worst 20 "blackspots" identified for the calender year 1981.

The implementation of State-wide intersection control is now virtually complete with only isolated Councils still to complete works on local roads. This work involved the establishment of a road heirarchy plan for all Council areas and the signposting of all road junctions other than T-intersections to establish priority control.

#### Traffic Signal Co-ordination

The scheme to provide dynamic co-ordination of traffic signals throughout Sydney, Newcastle and Wollongong was continued during the year with an additional 98 signals connected to the computer system. A total of 783 intersections are now connected to the network and a further 154 sites in the Sydney central business district are connected to a less sophisticated system. Research has shown that signal co-ordination substantially reduces journey time, the number of stops required by motorists, and, when the scheme is completed has the potential to reduce the States petrol consumption by 60 million litres per year.

#### Cycleways

The Authority, continued its involvement in the subsidy scheme to fund cycleways on a 50/50 basis with Councils. In addition the Authority makes available to Councils on request, advice on the planning and engineering aspects of cycleways. During the year 14 cycleways were completed and several others were in hand at 30th June, 1983.

#### Miscellaneous Works

During the year approximately 60 miscellaneous traffic management schemes were completed. These works included improving skid resistance at sites with accident skidding histories, erection of guardrail to reduce accident severity, provision of additional lanes for climbing and overtaking and assorted works including bus bays and median adjustments.

## Arterial Roads - Improvements

Over the last 10 years traffic on urban roads has increased by roundly 25%, yet improved traffic management techniques on arterial roads has brought about an average  $2\,\mathrm{km/h}$  increase in speed for vehicles travelling toward the city. While the increase may seem small, it is important to note that the percentage of traffic travelling at a speed over  $40\,\mathrm{km/h}$  has increased from 27% in 1972 to 44% in 1982.

Average traffic speed variations on the seven major arterial to the City are - Pittwater Road +2 km/h; Pacific Highway +8 km/h; Epping Road +2 km/h; Victoria Road -4 km/h; Parramatta Road +4 km/h; Liverpool Road +2 km/h; Princes Highway +1 km/h.

On those arterial roads average speed has increased for traffic travelling from the City from 29 km/h in 1972 to 36 km/h in 1982. Average peak hour speed from the city along Parramatta Road increased by 18 km/h and by 12 km/h along Liverpool Road.

The foregoing information resulted from Department of Main Road's surveys. More recent independent studies by the NRMA, undertaken in March 1983, substantiate the Department of Main Road's work in that further slight increases in vehicle speeds over those of 1982 were recorded on major arterial roads north of the harbour.



## Traffic Accident Research Unit

The unit provides the Authority and other organisations with scientific and technical information embracing the human, vehicle and environmental factors associated with traffic crashes.

The Unit's general objectives are to expand knowledge and understanding of matters related to traffic safety and to develop information that can lead to specific crash and injury counter measures.

It proceeds toward those objects by research and development work which allows it to give the best available advice based on

- the monitoring of world trends, activities and advances in traffic safety through literature search and review and the participation in committees and conferences;
- engineering testing and behavioural evaluation of vehicle components and accessories;
- surveys of road user behaviour;
- surveys of community attitudes, motivation and preferences;
- monitoring mass media communication and publicity effectiveness;
- data processing and the analysis of crash and other statistics.

As a consequence of the Unit being transferred from the Department of Motor Transport to the Traffic Authority late in 1981 a need was seen during the year under review to rationalise the Unit's administrative and clerical support capacity. Consequently its resources were most closely integrated with the Authority's Secretariat administrative structure. Aligned to the restructuring of its administration further reorganisation proposals were being considered at the close of the year to better integrate the Unit's multidisciplinary activities.

A major consideration in the Unit's activities is that it should conduct research which is cost effective, that is, research which is likely to produce the greatest prospects for benefit in assisting to reduce traffic crashes within the limit of available funds. To that end a Project Review Board was established during the year. The Board reviews research and development proposals in the light of their feasibility, benefits, costs and priority. The project management system adopted by the Board provides for periodic reviews and examinations of projects approved to proceed.

## **Finances**



Finance for the provision of traffic control facilities and related works is controlled through the Traffic Facilities Fund established as a Special Deposits Account at the Treasury. Other than recommending to the Minister the provision of appropriate funds to cover particular programmes and allocating priorities for their expenditure, the Authority has no direct control over the availability of its funds.

#### Notes to and Forming Part of the Accounts

- The financial statement has been prepared on a modified accrual basis, whereby certain salary payments have been accrued. All other income and expenditure have been disclosed on a cash basis and do not include amounts owed to or by the Fund.
- The statement has been prepared having regard to accounting standards jointly promulgated by the Australian Society of Accountants and the Institute of Chartered Accountants in Australia.
- The Authority has adopted, where practicable, the guidelines issued by the Working Party in Public Sector Accounting and Reporting Standards.
- 4. The financial statement has been prepared on the basis of historical cost and amounts have been rounded to the nearest dollar. Comparative figures for the previous financial year are shown on the left side of the statement.
- 5. Section 24 of the Traffic Authority Act, 1976 provides for both the Commissioner for Main Roads and Commissioner for Motor Transport to recoup the costs incurred in connection with:-
  - (i) the activities of the Authority; and
  - (ii) the carrying out of any activities, works or services the cost of which is to be met from the fund.
- 6. The only major assets and liabilities of the Fund are those referred to in the notes 7, 8, 9 and 10 hereunder.
- 7. During the year a loan of \$1,500,000 was obtained from the Government Insurance Office. The terms of the loan provided for the payment of interest at six monthly intervals with the principal repayable after ten (10) years.
- 8. Borrowings by the Authority, to date, total \$2,700,000. A sinking fund has been created to provide for the redemption of the loans and, in this regard, an amount of \$217,000 has been charged to Administration and invested with the New South Wales Treasury Corporation.
- The balance carried forward at the close of the year was held as cash within the State Treasury's Special Desposits Account.
- 10. No Reserves have been created and no provisions have been made for liabilities. A liability exists for an undertermined amount in respect of employee benefits such as superannuation, annual leave and long service leave etc. Such costs are currently met either by the Department of Motor Transport or the Department of Main Roads.
- 11. With the integration of the Traffic Accident Research Unit with the Traffic Authority, the administrative responsibility for traffic safety was consolidated under that Authority. The running costs of the Unit are now met from the general revenue. Fees charged for specially made number plates, used for this purpose in previous years, are now retained in the Road Transport and Traffic Fund.
- 12 The Traffic Authority maintains a Secretariat which comprises administrative, scientific and technical offices. Staff of the Secretariat is provided by the Department of Motor Transport.
- 13. The Department of Main Roads is the Authority's principal operations and construction agency.

### TRAFFIC FACILITIES FUND (SPEC STATEMENT OF RECEIPTS AND PAYMENT

1982	RECEIPTS	1983	
\$		\$	\$
	CONTRIBUTIONS FROM STATE SOURCES		
20,138,000	Road Transport and Traffic Fund	13,100,000	
525,000 13,825,000	Public Vehicles Fund Motor Vehicles Taxation	575,000 27,100,000	
2 2 2 2 4 2 2	Road Tolls - Sydney Harbour		
2,227,182 240,709	Bridge Berowra/Calga Tollway	2,105,003 443,815	
200,000	Waterfall/Bulli Tollway	212,715	
	Consolidated Revenue Fund- Contribution towards bicycle		
350,000	transport project	201,730	
1,218,795	Number Plate Sales		43,738,263
	CONTRIBUTIONS BY COMMONWEALTH GOVERNMENT		
1,949,139 37,500	Construction and Maintenance Traffic Safety Education	2,147,881 37,500	2,185,38
1,200,000	LONG TERM LOANS Government Insurance Office of N.S.W.	1,500,000	1,500,00
	MISCELLANEOUS		
	Department of Main Roads income from Services provided for		
763,279	Councls and other Bodies	820,657	
10,450	Sundry Receipts	22,575	843,23
42,685,054	TOTAL RECEIPTS		48,266,876
1,007,807	Balance Brought Forward - July 1st		734,798
43,692,861			49,001,674

ysanton

E.J. HANLON, ACTING CHIEF ACCOUNTANT, DEPARTMENT OF MAIN ROADS.

Auditor

The accounts of the Traffic Facilities Fund have been a

In my opinion, the accompanying statement of receiptin conjunction with the notes thereto, is a true and

SYDNEY,

18th November, 1983.

#### AL DEPOSITS ACCOUNT NO. 2662) S FOR THE YEAR ENDED 30TH JUNE, 1983

1982	PAYMENTS	19	1983	
\$		\$	\$	
	DEPARTMENT OF MAIN ROADS, TRAFFIC FACILITIES PROGRAMME			
	Maintenance and Operations			
	(less costs recovered)			
13,986,216	Pavement Marking and Signposting	15,276,851		
10,401,719	Traffic Signals	10,350,872		
2,070,131 1,992,487	Driver Aid Schemes Engineering Administration	2,403,822 2,490,758		
	Construction			
	Traffic Signals, Intersection	Could be -		
	Improvements and Railway Level			
5,483,705	Crossing Modifications	5,397,190		
324,038	Special Pedestrian Facilities	394,298		
	Traffic Management & Safety			
553,855	Projects	824,406		
724,188	Driver Aid Schemes	297,510		
160,325	Cycleways	632,123 1,020,863		
1,342,777	Engineering Administration	1,020,003	and the second	
2,090,293	Administrative Expenses	2,344,729	41,433,422	
39,129,734				
	TRAFFIC AUTHORITY			
3,070,135	Administration	3,702,603	1 - 1 - 1	
144,040	Transport Planning & Research	78,250		
587,954	Traffic Safety Education & Research	1,670,632		
	Commonwealth Grants for Planning			
	& Research Transferred towards			
	Expenditure met from Road Transport  & Traffic Fund -			
21,055	(Chief Engineer D.M.T. Projects)	<u></u>		
5,145	Miscellaneous		5,451,485	
3,828,329				
42,958,063	TOTAL EXPENDITURE		46,884,907	
734,798	Balance Carried Forward 30th June		2,116,767	
43,692,861			49,001,674	

Certificate

dited in accordance with Section 50 of the Audit Act, 1902.

s and payments for the year ended 30th June, 1983, read air record of transactions as shown by such accounts.

AUDITOR-GENERAL OF NEW SOUTH WALES P.A. BALDING,

P.A. BALDING, EXECUTIVE ACCOUNTANT, DEPARTMENT OF MOTOR TRANSPORT.



# Ongoing Programmes

Major—Minor Road System. During the year under review the Authority's long standing aim for the establishment of a system intersection control for all intersections in the State was virtually completed. With the introduction of the T junction rule in 1981 and the co-operation of councils in determining road hierarchy including policy on intersection control for their areas it became possible for most intersections in the State to be covered by some form of traffic control. The control is such that all arterial and sub-arterial roads and most collector roads have "stop" or "give-way" signs or traffic signals at intersections to remove any doubt for motorists as to how they should proceed.

## Sydney Co-ordinated Adaptive Traffic System

The Sydney Co-ordinated Adaptive Traffic System (SCATS) is recognised as one of the world's most advanced traffic control system. Microcomputers at signal sites are linked to regional master computers which are linked in turn to the central supervising computer located in the Department of Main Road's Traffic Control and Emergency Centre, Oxford Street, Sydney. Through this system, the operating cycles of connecting traffic signals are controlled and co-ordinated in response to traffic flows and conditions. SCATS is progressively being extended to cover the whole of the Sydney Metropolitan area and the urban areas of Newcastle and Wollongong.

Complementing SCATS is a sophisticated system of computer graphics which enables surveillance by colour codes of traffic flows and densities on Sydney's major traffic routes. Problem areas can be pinpointed and individually monitored and signal settings adjusted accordingly. The computer graphics system came into full operation in the 1982/83 period.

During the four-day train strike in mid February 1982 a procedure was developed whereby the full range of facilities available at the Centre was used to monitor and adjust the operations of arterial road traffic signals connected to SCATS. In most cases these temporary adjustments which involved increasing the 'green' time cycle length of the heaviest direction of traffic flow increased traffic thoughput on Sydney's major arterial road network.



Pictured is a computer terminal mounted in the Department of Main Road's helicopter monitoring SCATS operations (Photographs, courtesy of Philips Electronic Systems).



Actual on-street conditions are monitored by the computer graphics system supplemented by a special field unit comprising experienced traffic engineering staff and a senior officer from Police Traffic Branch. This unit makes use of the Department's helicopter when available. A computer terminal mounted in the helicopter is used to monitor and refine SCATS operation to take account of any loss in road capacity caused by accidents, breakdowns and illegally parked vehicles. The Department's and Police radio communications systems enables the combined resources of both Departments to be quickly directed to trouble spots.

## Sydney Road Hierarchy Plan

Over the last two years the Authority in close consultation with Council Officers has been developing a Road Hierarchy Plan for the Sydney metropolitan area. The objective of this Plan is to produce a rational road system for Sydney embodying safety, efficiency and environmental considerations. The Plan, when completed, will provide the framework necessary for the orderly planning and implementation of local area management schemes.

The first stage of the Plan which involves the identification of a short term arterial/sub-arterial road network and truck route system for the Sydney metropolitan area is nearing completion. Maps showing the proposed road hierarchy have been sent out to all Councils for comment and background reports are currently under review by the Authority.

## Pitt Street and York Street Proposals

The establishment of a mall in Pitt Street to improve pedestrian amenity in the retail heart of Sydney's Central business district has long been an objective of the Council of the City of Sydney. In February 1983 an application to limit vehicular access in the section of Pitt Street between Park and Hunter Streets was considered by the Authority. Based on the investigations of an interdepartmental working party the Authority gave its consent to proceed with the scheme subject to a number of conditions one of which was the implementation of various traffic management measures to accommodate diverted traffic and maintain existing bus travel times in the City.

The restoration of the Queen Victoria Building has also been a long term objective of Council. In November, 1982 a development application for this undertaking was submitted to the Authority. The proposal included the construction of a 700 space parking station beneath York Street adjacent to the Queen Victoria Building. Following the examination of the proposal by the Authority's Development Committee, Council was advised that the development application was acceptable provided that bus and traffic operations were maintained in York and George Streets during the construction of the parking station and the pedestrian tunnels linking the Queen Victoria Building to Town Hall Station and adjoining retail stores.



The Authority was subsequently advised that because of financial reasons it was not possible to maintain all traffic operations in York Street and that an "open cut" method for the construction of the parking station was now proposed. This would require the closure of York Street for a period of 56 weeks.

Given the high priority accorded to the Queen Victoria Building redevelopment by the State Government and anticipated disruption to bus and traffic operations occasioned by the proposed concurrent closures of Pitt and York Streets, the Traffic Authority resolved in mid-June 1983 that the Pitt Street Mall project should be deferred until York and George Streets were again available for all traffic. As at 30th June, 1983 Council was awaiting ratification of the resolution by the Government.

## Parking of Heavy Vehicles in Residential Areas

Parking of heavy vehicles on residential streets has been a frequent source of public complaint to highway and Traffic Authorities.

Due to public concern about the nuisance caused by parking of heavy vehicles on residential streets, the Authority has seen a need to examine the problems in the light of the complaints received from a number of residents in different Council areas in Sydney.

A report examining the problems created by indiscriminate parking of heavy vehicles on residential streets was considered by the Authority's Technical Committee at the close of the year. The Committee agreed to the implementation of a trial heavy vehicle parking scheme for a period of six months in selected Council areas as recommended in the report and that a Working Party be formed consisting of the Transport Workers' Union, Police Traffic Branch, NRMA and the Traffic Authority to examine and monitor the trial. At the close of the report year work was progressing towards establishing a Working Party to plan, implement and monitor a trial scheme.

Evaluation of the trial scheme would determine the viability of new proposals for implementation on a permanent basis in problem areas in Sydney.

## Transit Lanes

Currently Sydney has 19 route kilometres of transit lanes in the morning peak and 7.5 route kilometers in the evening peak. Design and implementation of transit lanes in different parts of Sydney have been associated with several other traffic management measures, including in appropriate cases, tidal flow, clearways, intersection and signal improvements and local area traffic management schemes designed to remove through traffic from residential streets.



Continuous monitoring and evaluation of the effectiveness of current transit lanes in Sydney, have resulted in investigations being carried out into proposals for an extension of the transit lanes in Epping Road, Lane Cove in the morning peak and deletion of short sections of transit lanes of the Warringah Expressway and north from the Spit Bridge in the evening peak period. At the close of the year investigations were proceeding.

In addition to buses, taxi cabs, private hire cars, motor cycles and any vehicles carrying three or more occupants, Police, Fire Brigade and Ambulance Vehicles may now use transit lanes at all times irrespective of the number of vehicle occupants. The Motor Traffic Regulations have been amended accordingly with effect from 28th January, 1983.

## Bus Priority Right of Way

At the close of the report year the Traffic Authority established a Working Party comprising representatives from Urban Transit Authority. Department of Main Roads, Police Department and NRMA to examine several proposals for bus priority measures. The proposals embrace both new initiatives and the development of existing bus priority measures as part of an ongoing programme to assist the movement of bus passengers, minimise delays, improve bus schedule adherence and generally to help enhance the public image of bus service as a major commuter transport mode.

The following bus priority measures are currently under investigation by the Working Party;

- · Sydney Harbour Bridge · Northbound a.m. peak bus only lane.
- · Penshurst Street, Willoughby · Southbound a.m. peak queue by pass.

The question of providing priority over other traffic for buses leaving bus stops and bus bays has been the subject of intense investigation by the Traffic Authority and the Urban Transit Authority. Similar bus priority measures are widely practiced in Europe and those recently introduced in Victoria are showing significant improvements overall.

Although the Traffic Authority adopted the recommendation that buses be given regulatory right of way when leaving bus stops and bus bays, it subsequently decided that a courtesy campaign be mounted by the Urban Transit Authority and its effects monitored and evaluated before any regulatory change was introduced.

As part of the courtesy campaign the buses were fitted at the rear with advisory "Please Give Way" signs to familiarize motorists with the principle of priority for buses leaving bus stops and bus bays.



## Clearways

In the Sydney Metropolitan area clearway restrictions are in force on most of the major traffic routes and generally apply on weekdays from 6.30 a.m. to 9.30 a.m. and 3.30 p.m. to 6.30 p.m. on one or both sides of such routes as necessary where the level of service would otherwise be very low with the traffic volumes exceeding the capacity of the roads concerned. Investigation of new clearway proposals in congested arterial roads in Sydney is an on-going task of the Authority.

## Secretariat - Performance Statistics

In supporting the Authority's work its Secretariat provides administrative and secretarial assistance to the Authority and its committee structure.

During the year under review some 2200 major items of correspondence were received, considered and dealt with by the Secretariat. Five hundred of those items were received from the Ministry of Transport, the remainder being received from the public, organisations, Government Departments, councils and other Authorities.

Administrative work for the Secretariat includes the preparation of agendas, business papers, minutes and correspondence arising from meetings of the Authority, its standing committees and, in some cases, its ad hoc committees.

This year such work involved 12 meetings of the Authority and 57 meetings of its standing committees.

The following figures illustrate the scale of work involved in attending to the standing committees.

Committee	Meetings	Matters Discussed
Principal Advisory	10	96
Development	24	448
Technical	15	207
Traffic Safety	8	69

Also, the Secretariat provided either administrative assistance, advice or representation to the some 65 external committees or working parties with which the Traffic Authority's work is involved.



## Light Traffic Thoroughfares

To provide paper designation for light traffic thoroughfares a road sign for that purpose was prepared by the Authority after consultation with the Department of Local Government and Lands. Its design was incorporated in Ordinance 30D of the Local Government Act.

Roads may be declared light traffic thoroughfares by Councils for reasons of structural inadequacy or in order to preserve the amenity or safety of residential areas. In the case of the latter the Traffic Authority delegates power to Councils to proceed, subject to proposals having been approved by the Department of Main Roads and the Police. The instrument of delegation exempts, heavy vehicles having an origin or destination within a declared light traffic thoroughfare, where emergency conditions exist or where a heavy vehicle has no other practical route by which to reach its destination.

## Local Traffic Committees

In alignment with its overall strategy of delegation and decentralisation of decision making to the local level, the Authority in June 1976 delegated to Councils powers relating to the provision of certain traffic facilities. Such powers are exercised by councils following proposals made by Local Traffic Committees which comprise representatives of the Department of Main Roads, Council and Police and the local Member of Parliament. The implementation of proposals is conditional upon the agreement to them by the Department of Main Roads and Police members.

In order to simplify the decision making process regarding the installation of traffic control signs and line markings, the Traffic Authority intended at the end of the year to eliminate the concurrence powers of the Department of Main Roads and the Police Department. Execution of the delegated power of Councils will be conditional upon consideration of advice from the Local Traffic Committee being the majority view determined by its membership. Where there is no majority view from the above representatives Councils are expected to consider the views of individual members before exercising its powers in any particular instance.



## Research and Development

## Traffic Safety

The Traffic Accident Research Unit's research and development activities are mainly concentrated on three factors - human, vehicle and environmental in situations before, during and after a crash. Many elements are likely to be involved in crashes. The matrix below identifies some of them as examples.

	Before the Crash	In the Crash	After the Crash
HUMAN FACTORS	Alcohol Education Enforcement	Seat belt use crash helmet use	Medical care
VEHICLE FACTORS	Brakes Tyres	Steering columns Vehicle interiors	Entrapment
ENVIRONMENTAL FACTORS	Road design  Traffic engineering	Roadside furniture Natural hazards	Accessibility

In examining those factors and elements the Unit is structured to provide three sections of activity. They are  $\cdot$ 

• The Behaviour Section provides research based advice on the human factors contribution to traffic crashes. Within Legislative and allied areas such advice includes opinion on the effectiveness of driver training measures, licence testing and the enforcement of traffic rules.

This year emphasis has been given to the effects of alcohol and drugs (both illicit and prescribed) and to the effects of Random Breath Testing. With Traffic Authority funding, studies in collaboration with the Department of Pharmacology at the University of Sydney examined how drugs, alcohol, fatigue and ill-health affected perception and motor skills. As the year closes, a joint evaluation of blood alcohol selftesting devices is in progress with the University. Survey research has been conducted into attitudes and behaviour including the perceived risk of detection while drink-driving and its deterrent effect. Seat belt wearing surveys have been conducted with a view to implementing measures to increase their use, particularly in rural areas where wearing rates are low.

As mentioned previously, the Authority in conjunction with the Bureau of Crime Statistics and Research is evaluating the effectiveness of the Random Breath Testing Legislation to provide advice which may assist in bringing the Legislation to its maximum effectiveness.

In another behavioural area, that of communications research, submissions urging that undesirable traffic related content be omitted from mass media advertisements have been provided, or are under preparation, for consideration by the Trade Practices Commission, the Media Council of Australia and the Australian House of Representatives Standing Committee on Road Safety.



The Authority's booklet "A Simple Guide to Child Restraints" developed in the Behaviour Section, has been revised and expanded in collaboration with the Australian Department of Construction and Transport's Office of Road Safety. The booklet, together with a "Shopper's Guide" to child restraints, is intended for distribution shortly throughout Australia.

The Behaviour Section also developed for the State Bicycle Advisory Committee the series of "Spike's Bike Books" mentioned elsewhere in this report.

• The Analysis Section is responsible for maintaining traffic crash data and for investigating environmental and traffic engineering factors which may contribute to crashes and in evaluating various countermeasures that have been introduced to improve traffic safety.

Enhancements to the database in the year under review included the first stages of incorporating selected transport figures from the Ambulance Services and selected hospital figures provided by the Health Department.

A promising initiative in the analysis of hazardous areas begun this year is the design and initial development of an advanced, computerised system for locating crashes on maps. When fully developed the system will allow "instant" computer graphic reporting on problem areas throughout NSW by "precise" location, time of day and severity of crash.

 The Engineering and Medical Section. Responsibilities include the evaluation of vehicle components and accessories with a view to protecting road users from injury. In previous years research and testing has included occupant restraints of various kinds, crash helmets, vehicle interior crash padding and collapsible lighting poles.

In the year under review particular attention has been given to the further development of effective, low cost infant restraints and the development of vehicle interior crash padding.

## Collisions with Roadside Objects

It has long been recognised that traffic crashes involving fixed roadside objects including utility poles and trees contribute significantly to the State's crash statistics each year.

Following research into the principal causes of these types of collisions the Electricity Development Act, 1980 was amended to empower the Energy Authority, acting on the advice of the Traffic Authority, to direct the removal or relocation of hazardous roadside electricity poles. Additionally an interdepartmental committee was established in 1981 to devise and implement a program for the removal or relocation of utility poles which have a high accident record.

In the first stage of the remedial program attention has focussed on those poles involved in 3 or more accidents over the last 5 years. Of the 187 poles within the category, 71 have or will be relocated, traffic management measures have been instituted at a further 25 sites to lessen their accident potential and the remainder are under investigation. All authorities involved in the programme are anxious to proceed as quickly as possible and at the close of the report year the remedial programme as a whole was gathering momentum.

Draft policies and standards relating to the placement of roadside utility poles are also being developed by the Committee.



The research referred to above showed that roadside trees and shrubs can also compromise the safety of road users. To provide guidance on this matter the Authority has published a provisional bulletin which deals with minimum lateral clearances and sight distance requirements for verge planting under various traffic conditions.

#### Shared Zones

The Traffic Authority is currently considering the possible adoption of "shared zones" in New South Wales. In essence, a "shared zone" is a street in which there is no formal segregation of vehicles and pedestrians, and pedestrians are afforded equal rights, if not priority over, motor vehicles in the area treated. Such a concept has its foundation in the Dutch "woonerf" which is a neighbourhood design which attempts to balance the contradictory desires of people to have both mobility and protected residential neighbourhoods.

The success of the "shared zone" depends on changing and improving the physical environment so that drivers are aware they are entering a special area. Planting, street furniture and paving converts the former street into an attractive outdoor living area and the residential street becomes an area shared equally by pedestrians, bicycles and motorised vehicles.

At present it is considered that the implementation of "shared zones" would be suitable on very lightly trafficked local streets in residential areas where the benefits would include improving the quality of residential neighbourhoods by making them safer places (from the point of view of traffic safety) and providing recreational opportunities to residents, both children and adults, through the provision of play spaces, benches and tables and landscaping the area, whilst maintaining vehicular access for service and emergency vehicles and residents. Additionally, adoption of "shared zones" is being considered in commercial areas, car parks and shopping malls, where motor vehicles and pedestrians cannot be segregated and driver behaviour should be compatible with pedestrian behaviour. In these areas the benefits will basically accrue to pedestrians by giving them equal rights with motor vehicles through the introduction of legislation.

# Legislation



## Legislative Developments

During the year under review the Traffic authority sought changes to the various legislation on matters of traffic safety and traffic management. Before proceeding to seek amendments to the legislation the Authority reviews and studies each proposal and makes a recommendation to the Minister for Transport. Such proposals arise from representations to the Authority or are initiatives from within the Authority itself.

- Security of Loading. On 30th July, 1982 the Motor Traffic Regulations were amended to require all loads on any vehicle, including trailers, to be secured against movement by using appropriate tie-down methods suited to the type of load being carried. It is now an offence to allow any load or equipment to become dislodged or project from a vehicle in a manner which may cause injury or damage. Where freight containers with corner fittings are carried they must be secured to vehicles with twist locks or other suitable devices. The new regulations are aimed at reducing the number of accidents involving trucks losing loads.
- Heavy Vehicles Travelling in Convoy. Because of the increasing incidence of heavy vehicles travelling too closely together at fast speeds on freeways and rural multi-laned roads, the Motor Traffic Regulations were amended on 17th December, 1982 to require drivers of truck or truck/trailer combinations with an unladen weight of more than 3 tonnes and vehicles towing caravans to keep at least 60 metres behind similar vehicles in the same and in other lanes, except when overtaking. The new law does not apply in built-up areas as defined by street lights, nor in respect of signposted climbing lanes.
- Use of Transit Lanes by Police, Fire Brigade and Ambulance Vehicles. Following a review of current exemptions, and recognising that unrestricted use of transit lanes would enable Police, Fire Brigade and Ambulance personnel to return to their bases more speedily and be ready for further call-outs, the Motor Traffic Regulations were amended on 28th January, 1983 to permit Police, Fire Brigade and Ambulance vehicles to use transit lanes at all times, irrespective of the number of vehicle occupants.
- Itinerant Mobile Street Vending Vehicles. The attraction of mobile vending vehicles, such as ice cream vans, poses a significant hazard to small children. Accident research has established that in recent years, on average, one child has been injured each month and one killed each year from accidents associated with such vehicles. With a view to improving safety near these vehicles the Motor Traffic Regulations were amended to provide that from 1st March, 1983 any motor vehicle used for the vending of ice cream or similar confectionery must be fitted with a flashing warning lamp, mounted to the roof of the vehicle, which must be switched on while the vehicle is stopped to serve customers.

The Authority is also seeking amendments to Ordinance 30 of the Local Government Act, 1919, to permit councils to exercise greater control over the operation and areas of operation of mobile vending vehicles.

● Illegal Use of Flashing Turn Indicators. To eliminate the well-meaning, but decidedly dangerous, practice of some drivers of slow moving vehicles using their turn indicators as a means of advising following motorists that the road ahead is clear for them to overtake, and in view of reports of near collisions in rural areas resulting directly from drivers misinterpreting such signals, the Motor Traffic Regulations were amended on 25th March, 1983 to make it an offence to use turn indicators unless a driver actually intends to turn or diverge or where all four indicators are flashed to indicate a hazard.



- Repeal of Motor Traffic Regulation 80C. For many years heavy vehicles were prohibited from using sections of certain highways approaching Sydney between 3 p.m. and 7 p.m. on Sundays and the last day of public holiday weekends. This curfew was introduced when the highway approaches to Sydney were narrow and of poor standard. Removal of the curfew was recommended by the Commissioner of Inquiry into the New South Wales Road Freight Industry in the light of evidence that the standard and condition of the roads had vastly improved together with improvements to heavy vehicle design and performance. The Regulation was therefore repealed on 25th March, 1983, the situation is to be monitored and reviewed by the Traffic Authority after a period of six months, with a view to restoring the restrictions should there be any adverse developments.
- Manually Operated Parking Meters. On 25th March, 1983 Ordinance 34A under the Local Government Act, 1919, was amended to permit councils to replace the existing coin actuated parking meters with manually operated meters if they so wished. Manually operated meters did not previously conform with the provisions of the Ordinance.
- Quadrocycles/Cyclomobiles. On 15th April, 1983 the Metropolitan Traffic (General) Regulations were amended to enable the use of approved bicycles constructed to seat two or more persons abreast, in locations approved by the Traffic Authority.
- Light Traffic Thoroughfares. Ordinances 30D and 34 under the Local Government Act, 1919, do not permit emergency vehicles or heavy vehicles to use light traffic thoroughfares, declared under those Ordinances, even when such vehicles are required to use those thoroughfares to gain access to their destinations. The Authority is now seeking amendments to the Ordinances to correct these anomalies.
- Parking for the disabled. In December, 1981 the Traffic Authority issued to all councils a publication "Parking for the Disabled Guidelines", to encourage and assist councils in the provision of on-street preferential parking spaces for disabled persons. A major inhibition to the provision of specially designated areas was that the signs, not being signs prescribed by regulation, had no legal significance and, consequently, were not enforceable.

To remove this anomaly the Motor Traffic Regulations and the Metropolitan Traffic (General) Regulations were amended on 24th June, 1983 to provide for the introduction of special areas signposted "No Standing Authorised Disabled Persons' Vehicle Excepted" for sole use by vehicles displaying Disabled Persons' Parking Authorities.

- Truck Zones. A Working Party set up up conduct an overall review of "Loading Zones" found that a substantial proportion of vehicles using them were station waggons, of which a large majority were not engaged in loading or unloading activity. The Traffic Authority is now seeking amendments to the Motor Traffic Regulations to enable the establishment of special "Truck Zones" to assist trucks making deliveries, particularly in the Central Business District of Sydney.
- State-wide Application of the Metropolitan Traffic Act, 1900. Many inconsistencies have been identified between provisions of the Metropolitan Traffic Act, which covers the Sydney, Newcastle and Wollongong Transport Districts, and Ordinance 34 under the Local Government Act, 1919, which controls the movement of pedestrians, bicycles and other non-motorised traffic on public streets througout the State.

The Minister for Transport and the Minister for Local Government have agreed in principle to the application of the Metropolitan Traffic Act Statewide, thus bringing control of non-motor vehicle traffic under the one set of regulations. Discussions are currently proceeding between the Traffic Authority and the Local Government Office to identify all the regulatory differences and prepare the necessary amending legislation.



• Random Breath Testing. Arising from recommendations by the Parliamentary Joint Standing Committee on Road Safety ("STAYSAFE"), the Motor Traffic Act was amended on 17th December, 1982 to enable (for a three year trial period) Police officers to cull vehicles from traffic at fixed roadside locations or intercept vehicles at random and require motor vehicles drivers and motor cycle riders to submit to screening tests to determine whether they have a blood alcohol concentration (B.A.C.) in excess of the legal minimum of 0.05%. Those registering more than the limit are then placed under arrest and subjected to a more exacting breath analysis, conducted at either a mobile breath analysis station or a Police Station, on a machine capable of providing evidence of the level of B.A.C. which could be sufficient for Court purposes. If the breath analysis machine confirms a B.A.C. of 0.05% or more, the driver/rider is then formally charged. Where the B.A.C. is below 0.05% no particulars are recorded and the driver/rider is allowed to proceed.

The Legislation also provided for compulsory blood tests of drivers, motorcyclists and pedestrians admitted to hospital following road crashes, including mandatory involvement of medical practitioners and protection for them from litigation, and provided for substantial increases in a number of existing penalties relating to drink-driving offences.

During the three year trial period random breath testing will be monitored for efficiency and evaluated for effectiveness by the Authority's Traffic Accident Research Unit and the Bureau of Crime Statistics and Research.

• Penalties. The Motor Traffic Regulations were amended on 7th February, 1983 to provide for increased penalties in respect of fixed penalties for offences under the traffic infringement notice scheme. The increases were generally in line with those in the All Groups Consumer Price Index for Sydney since the penalties were previously adjusted.

# A S. S. W.

# Public Relations and Participation

#### **Public Relations**

In the promotion of traffic safety measures, including the provision of a safer traffic environment for road users, the Authority works toward generating community awareness of its activities through the distribution of media announcements, leaflets, brochures, posters, guidelines and reports. Also, it utilises the opportunities which arise day-by-day for officers of councils and the Department of Main Roads to convey an understanding of the Authority's functions in particular matters at local level.

During the year under review the Authority released to the media each month a bulletin providing details of road crash fatalities on a local government area basis. Such bulletins attracted State-wide media interest particularly as the road toll began its decline after the introduction of random breath testing.

The Authority publishes discussion papers, research reports and guidelines resulting from its deliberations, the guidelines reflect the Authority's policies on a variety of topics. Some of the more important titles are listed below.

- Provisional Guidelines for the Authorisation and Installation of Traffic Control Facilities.
- Guidelines for Residental Parking Schemes.
- Functional Classification of Roads.
- Traffic Generating Developments.
- Parking for the Disabled.
- Planning for the Bicycle.
- Provisional Guidelines for Local Area Traffic Management.
- Provisional Guidelines for Tree Planting on Urban Roads.

A schedule of other Traffic Authority publications is available on request.

During the year under review the Authority produced and distributed the following major publications -

 May 1982 - Procedures for consultation of Traffic Generating Developments (released July 1982).

July 1982 · Police and Guidelines for Traffic Generating Developments.

July 1982 - Planning for the Bicycle.

January 1983- Guidelines for the Safer Operation of Mobile Vending Vehicles.

February 1983- Designing for the Bicycle.

 May 1983 - Road Traffic Crashes in New South Wales; Statistical Statement - Year ended December 31st, 1981.

June 1983 - Provisional guidelines for Local Area Traffic Management.

Also, during the year public information brochures produced by the Authority were widely distributed concerning the use of roundabouts, child restraints and the planning and implementation of local area traffic management schemes. Other material distributed included a range of traffic safety advice produced by the Australian Office of Road Safety with the assistance of the Traffic Authority of New South Wales and road safety authorities of the other States and Territories.



### Community Participation and External Guidance

The diversity of interests and experties of individuals comprising the authority itself, together with that of persons involved in the authority's formal and ad hoc committee structure encompasses a broad section of the public's interests.

Such a wide base of participation ensures an awareness of issues and an input beyond that available from traditional transport administrations.

The Authority has available to its decision-making process expertise or opinion from industry, unions, local government, education, medicine, public health, community and motoring organisations, the Judiciary and from a variety of academic and technical disciplines. It maintains close liaison with other organisations which combine to provide the Authority with the contact it needs to be responsive to community needs and to changes in social attitudes and to be aware of technical innovations.

In the development of its guidelines the Authority encourages the formation of special committees to allow the participation of appropriate interested parties to obtain their views before final policies are determined. For instance, in planning matters the Authority regards it as important to obtain an input from such organisations as the National Roads and Motorists' Association to represent the motoring public, the Local Government Engineers' Association for technical advice, and the Local Government Planners' Association, for their expertise in development matters.

# Directory

#### CHAIRMAN, TRAFFIC AUTHORITY -

J.W. Davies, I.S.O., O.St.J., B.Ec., F.C.I.T., Commissioner for Motor Transport, N.S.W. Box 110 P.O. Rosebery 2018. Telephone (02) 662 5555

#### TRAFFIC AUTHORITY SECRETARIAT -

Box 110 P.O. Rosebery. 2018

3rd Floor, Rosebery Centre, Primrose Avenue, Rosebery Telephone (02) 663 8222

**DIRECTOR AND** 

H.L. Camkin, B.E., Dip. T. & C.P., M.I.E. Aust., DEPUTY CHAIRMAN F.C.I.T.

PRINCIPAL

B.J. Hazel, B.E., M.S.C.E., M.I.E. Aust, M.I.T.E.

**ASSISTANT** DIRECTOR

SPECIAL D.C. Herbert, B.Sc. (Eng.). M.I.E. Aust.

CONSULTANT ON TRAFFIC SAFETY

SECRETARY W.A. Levitt, F.A.S.A., F.C.I.T.

#### DEPARTMENT OF MAIN ROADS -

Traffic Signal Faults and Emergency calls · Sydney Metropolitan Area (02) 218 6825.

**DIVISIONAL OFFICES** 

Metropolitan P.O. Box 51, Milson Point 2061, Telephone 929 6555 P.O. Box 240, Parramatta 2150, Telephone 633 0888 Parramatta Central Mountains P.O. Box 191, Lithgow 2790, Telephone (063) 513356

(Lithgow)

Illawarra P.O. Box 1753, Wollongong 2500, Telephone

(Wollongong) (042) 29 3711

Hunter Valley P.O. Box 488, Newcastle 2300, Telephone

(Newcastle) (049) 26 1200

Lower North Coast P.O. Box 147, Port Macquarie 2444, Telephone

(Port Macquarie) (065) 83 1144

Northern Eastern (Grafton)

P.O. Box 576, Grafton 2460, Telephone (066) 42 3733

Murray/Darling P.O. Box 680, Broken Hill 2880, Telephone (Broken Hill) (080) 88 1411

Central Murray P.O. Box 21, Deniliquin 2710, Telephone

(Deniliquin) (058) 81 1005

P.O. Box 484, Wagga Wagga 2650, Telephone South Western

(Wagga Wagga) (069) 21 1133

South Coast P.O. Box 399, Bega 2550, Telephone (0649) 2 1600 (Bega)

Upper Northern P.O. Box 58, Glen Innes 2370, Telephone (Glen Innes) (067) 32 2733

Northern Western P.O. Box 530, Tamworth 2340, Telephone (Tamworth) (067) 66 5322

Central Western P.O. Box 334, Parkes 2870, Telephone (068) 62 1244

(Parkes)

Central Northern P.O. Box 489, Bourke 2840, Telephone (068) 72 2611 (Bourke)

Southern P.O. Box 183 & 479, Goulburn 2580, Telephone (Goulburn) (048) 21 1133

# AUTHORITA STATE

# **Appendices**

## Appendix 1

## The Traffic Authority's Operating Legislation

Traffic Authority Act - 1976 - the Authority has, subject to the control and direction of the Minister for Transport, the responsibility of:

- reviewing traffic arrangements in the State and formulating or adopting plans and proposals for the improvement of those arrangements;
- establishing general standards and principles in connection with the design and provision of traffic control facilities, and priorities for carrying out activities, works or services that are items of approved expenditure;
- promoting traffic safety;
- co-ordinating the activities of public authorities when they are directly involved in matters connected with the Authority's functions.

The Traffic Authority may also direct other public authorities to implement its plans, general principles and decisions.

Motor Traffic Act, 1909 - confers upon the Traffic Authority responsibility for the administration of the provisions of the Act and its Regulations relating to the regulation and control of traffic, motor vehicles and their drivers upon public streets, the provision of traffic control facilities and the determination of speed limits.

**Metropolitan Traffic Act, 1900** · confers upon the Traffic Authority responsibility for the administration of the Act and its Regulations relating to the control of animal-drawn, pedestrian, bicycle and other non-motorised traffic in the Metropolitan, Newcastle and Wollongong Traffic Areas.

Local Government Act, 1919 - requires the Traffic Authority to determine applications by Councils for consent to the closure of a public road to through traffic or the opening of a road which has been closed. Also provides that, subject to certain limited exceptions, a Council may control or regulate the use by traffic of public roads in accordance with the consent of the Traffic Authority or on approval or direction of the Minister.

Traffic Safety (Lights and Hoardings) Act, 1951 - confers on the Traffic Authority responsibility to direct the removal of any light, sign, hoarding, awning or structure which obscures or could be mistaken for any light, sign or device for the controlling of traffic.



### Composition Of Permanent Committees

### Principal Advisory Committee

Mr. H. L. Camkin Director and Deputy Chairman,

Traffic Authority (Chairman).

Mr. B.H. Butcher Chief Engineer (Traffic and Design)

Department of Main Roads.

Supt. G.D. Shaw Executive Chief Superintendent

(Traffic), Police Department.

Mr. J.R. Caldwell Manager, Transportation Branch,

Department of Environment and

Planning.

Mr. R.F. Morris Operations Manager, Bus, Urban

Transit Authority.

Mr. B. Searles Chief Traffic Engineer, National

Roads & Motorists' Association.

Mr. H.R. Wickham Traffic Authority Secretariat,

(Committee Secretary).

Meetings held: 10 formal meetings were held during the year.

## Traffic Safety Committee

Mr. H.L. Camkin Director and Deputy Chairman,

Traffic Authority (Chairman).

Mr. D. C. Herbert Special Consultant on Traffic

Safety, Traffic Authority Secretariat.

Mr. F. Hawes Assistant Traffic Engineer,

Department of Main Roads.

Supt. G.D. Shaw Executive Chief Superintendant

(Traffic) Police Department.

Mr. P. Daniels Curriculum Consultant (Phys.

Ed. Health), Department of

Education.

Mr. M. Price, S.M. Bench of Stipendiary

Magistrates.

Mr. R. Reece Executive Assistant,

Department of Motor Transport.

Mr. B. Searles Chief Traffic Engineer,

National Roads and Motorists'

Association.

Mr. H.R. Wickham Traffic Authority Secretariat,

(Committee Secretary).

Meetings held: 8 formal meetings were held during the year.

#### Appendix 2 (continued)



#### **Development Committee**

#### Permanent Members.

Mr. M. Rao Engineer (Traffic) Traffic Authority. Secretariat (Chairman).

Sergeant M. Lane, Traffic Planning Section, Traffic Branch, Police Department.

Mr. R. Lloyd, Engineer, Traffic Section, Department of Main Roads.

Mr. R. Baird, Traffic Authority Secretariat, (Committee Secretary).

#### Casual Members.

Mr. E. Edwards, Official Organiser, Transport Workers' Union of Australia (N.S.W. Branch).

Mr. R. Wilson, Transport and Traffic Planner, Urban Transit Authority.

Meetings held: 24 meetings held during the year.

#### **Technical Committee**

Mr. B. Hazel Principal Assistant Director, (Chairman)

Traffic Authority, Secretariat.

Mr. S. Dimitric Supervising Engineer,

Traffic Section,

Department of Main Roads.

Mr. R. Wilson Transport and Traffic Planner,

Urban Transit Authority.

Mr. M. Conroy Transportation Specialist,

Department of

Environment and Planning.

Chief Inspector N. Walden Police Traffic Branch,

Police Department.

Mr. E. Edwards Official Organiser,

Transport Workers' Union of Australia (N.S.W. Branch).

Mr. B. Searles Chief Traffic Engineer,

NRMA.

Mr. M. Virtue Traffic Authority Secretariat,

(Committee Secretary).

Meetings held: 15 meetings were held during the year.



# **Development Committee Matters**

#### (A) Matters Dealt with Development Committee.

Туре	Number	%
Major Development Applications	272	61
Minor Development Applications	99	22
Parking Stations	11	2
Environmental Studies	12	2
Local Environmental Plans	33	8
Other	21	5
TOTAL	448	100

# (B) Location of Matters Dealt With (Classified by Department of Main Roads Divisional areas)

D.M.R. Division	Number	%
Metropolitan	163	36
Blacktown	49	11
Parramatta	65	15
Hunter	48	11
Illawarra	23	5
Other Country Areas	94	21
Other Organisations	6	1
TOTAL	448	100

#### (C) Time Taken to Respond to Councils (sample of 252).

Less than 21 days	64	(25%)
22-30 days	96	(38%)
31-40 days	74	(30%)
More than 40 days	18	(7%)



## Membership of Forum of Road Safety Committees

Mr. H. L. Camkin Director and Deputy Chairman,

Traffic Authority (Chairman).

Dr. N. G. Dan Trauma Sub-Committee,

Australian Brain Foundation.

Dr. K. Harris

Dr. F. Rainsford St. John Ambulance Association.
Dr. D. B. Hempton Australian Medical Association.

Mr. D.C. Herbert Special Consultant on Traffic Safety,

Traffic Authority, Secretariat.

Prof. R. L. Huckstep C.M.G. Prince of Wales Hospital and

Royal Australian College of

Surgeons.

Dr. J. H. Hirshman Doctors' Reform Society and

Australian Consumers'

Association.

Mr. P. Leithhead N.S.W. Road Transport Industry

Training Committee.

Mr. P. Monaghan Life Insurance Federation of

Australia.

Mr. C. Reece National Safety Council of

Australia.

Mr. B. Searles National Roads and Motorists'

Association.

Mr. B. Stewart N.S.W. Drug and Alcohol

Authority.

Dr. D. Storey

Mr. K. Thomas

Australian Red Cross Society.

Save a Life a Day Movement.

Mr. A. Luckman Traffic Authority Secretariat

(Committee Secretary.)

Meeting held: Four meetings were held during the year.



#### WORKS COMPLETED BY DEPARTMENT OF MAIN ROADS NEW SOUTH WALES

#### Construction

Traffic Signals

Table 1 compares the number of sets of traffic signals in the state in 1982/83 financial year to the previous financial year.

Table 1

Traffic Signals	1981/82	1982/83		
Existing	1751	1811		
New Sets	64	64		
Removed	4	6		
Total	1811*	1869**		

<sup>\*\* 40</sup> sets reconstructed and 3 temporary sets installed

Table 2 shows the breakdown of the foregoing totals by location and type Figures for 1981/1982 financial year are shown in brackets:

Table 2

Location	Types											
		hicle uated		strian lated	Inner City	Total						
Sydney	1224	(1180)	226	(226)	120 (119)	1570 (1525)						
Newcastle	92	(91)	23	(22)		115 (113)						
Wollongong	80	(74)	11	(12)		91 (86)						
Country Areas	77	(71)	16	(16)		93 (87)						
Total	1473	(1416)	276	(276)	120 (119)	1869 (1811)						

In the Sydney Metropolitan, Wollongong and Newcastle urban areas, a further 98 intersections were connected to the Sydney Co-ordinated Adaptive Traffic (SCAT) System during 1982/83.

#### Intersection Improvements.

A total of 37 intersections were reconstructed with permanent channelisation during 1982/83 compared with 58 in the previous financial year.

Roundabouts -35 permanently installed

7 under construction

38 designs completed

<sup>\* 54</sup> sets reconstructed and 5 temporary sets installed



# Appendix 5 (Continued)

# Accident Blackspot Treatment. Accident levels "before" and "after" correction treatment. Cost effectiveness.

Intersection	Treatment	Date of	No of a	ccidents	Percentage	Estimated	Estimated	Approx
	constructed	implement- ation	"Before"	"After"	Accident Reduction	Annual Savings \$	Construction Costs \$	first year rate of return
Beresford Road/ Homebush Road Strathfield	Traffic signals	18/11/82	19 (6)	1 (6)	95	167,000	40,000	4.2
Hume Highway/     Elizabeth Drive     Liverpool	Provision of right turn phase	11/6/82	21 (6)	6 (6)	71	139,000	10,000	13.9
King George's Road/ Canterbury Road Wiley Park	signal re- construction with road widening and R.T. storage bay.	15/5/82	29 (6)	7 (6)	76	204,000	100,000	2.0
4. Rooty Hill Road/ Eastern Road Rooty Hill	Traffic signals	12/6/81	27 (6)	8 (6)	70	176,000	40,000	4.4
<ol> <li>Polding Street/ Smithfield Road Smithfield</li> </ol>	Intersection reconstruct- ed and roundabout provided	21/9/82	15 (6)	8 (6)	47	65,000	250,000	0.3
6. Bathurst Street/Day Streets Sydney	Traffic signals	23/7/81	38 (12)	17 (12)	55	97,000	40,000	2.4
7. Forest Road/King Georges Road Hurstville	Traffic signal mod. with turn restriction	5/6/81	19 (7)	17 (7)	11	16,000	10,000	1.6
8. Fairfield Street and off ramps from the Horsley Drive Fairfield	Nil (Traffic signals planned)	Not applicable	-	-		-	-	-
9. Hume Highway/ Burwood Road Enfield	Nil (Signal re- construction planned)	Not applicable	-	-	-	=	-	-
10. Hume Highway/ Johnston Road Bass Hill	Provision of right turn phase & anti- skid resist.	15/9/82	18 (8)	5 (8)	72	90,000	20,000	4.5
	at eastern end of the Junction.			107				
11. The Horsley Drive/ Polding Street Fairfield	Nil (Signal re- construction planned).	Not applicable	-		-	1.7	-	-
12 Princes Highway/ Jubilee Avenue Carlton	Nil (right turn storage bays planned)	Not applicable	-	-	-	-	-	-
13. Flinders Street/Sputh Dowling Street, Moore Park	Signal co- ordination up-graded	15/1/82	19 (8)	9 (8)	53	69,500	5,000	13.9
14. Hamilton Road/ Sackville Road Fairfield	Provision of right turn phase	14/2/83	To be analysed	-	-	-		-
15. Victoria Road/ Evans Street Rozelle	Signals up-graded	16/8/82	28 (9)	15 (9)	46	80,000	17,000	4.7
16.Falcon Street/ Warringah Freeway North Sydney	Nil	Not applicable	-	-	-	-	-	=
17. Broughton Street/ Gipps Street Concord	Nil (traffic signals planned)	Not applicable	-	-	-	-	-	-
18. Hume Highway/ Woodville Road/Henry Lawson Drive, Landsdowne	Skid resistance of pavement increased	15/6/82	44 (11)	37 (11)	16	35,000	42,000	0.8
19.Carlingford Road/ Pennant Hills Road Carlingford	Provision of right turn phase	15/4/81	23 (10)	9 (10)	61	78,000	10,000	7.8
20. Balmoral Street/ Newton Road Blacktown	Provision of right turn phase	1/7/82	10 (6)	3 (6)	70	65,000	15,000	43



# TRENDS IN FATALITIES FOR DIFFERENT CLASSES OF ROAD USERS

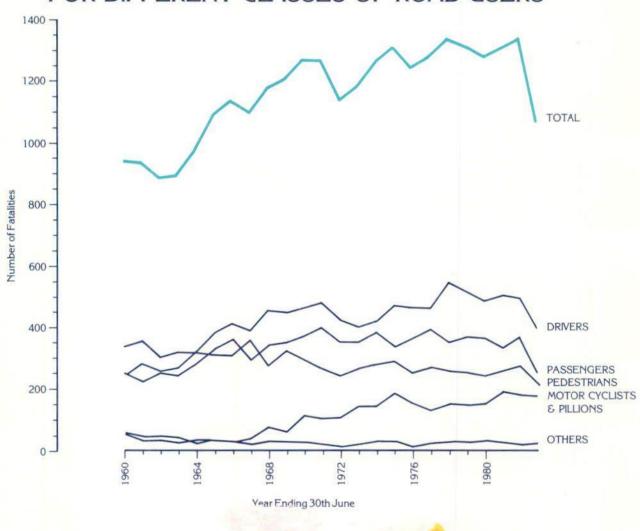


TABLE 1. Fatal Traffic Crashes in NSW for the year ended 30th June. Time and day of week. 1/7/82 - 30/6/83

Day of Work	TIME OF DAY													
Day of Week	12-3 am	3-6 am	6-9 am	9-12 noon	12-3 pm	3-6 pm	6-9 pm	9-12 mid- night	Not stated	Total				
Sunday	25	13	7	6	17	33	28	19	1	149				
Monday	11	4	7	14	8	36	16	11	0	107				
Tuesday	5	2	14	19	9	29	12	18	0	108				
Wednesday	5	1	19	12	14	30	17	18	1	117				
Thursday	7	4	16	14	21	22	22	22	0	128				
Friday	14	7	9	16	17	30	37	29	1	160				
Saturday	33	13	11	12	26	26	38	24	2	185				
Unknown	0	0	0	0	0	0	0	0	0	0				
TOTAL	100	44	83	93	112	206	170	141	5	954				

Note: This table includes preliminary data for the final months of 1982/3 which is subject to minor amendment

TABLE 2; Deaths from traffic crashes in NSW for the year ended 30th June. Age and class of road user killed 1/7/82 - 30/6/83.

Class of Road User	AGE													
	0.2	3-7	8-12	13-16	17-20	21-24	25-29	30-39	40-49	50-59	60-69	70	Unknown	Total
Driver	0	0	0	4	73	67	53	68	48	35	21	20	2	390
Passenger	12	13	7	30	60	22	25	23	11	11	21	19	1	255
Motor Cyclist	0	0	0	7	50	46	37	11	4	2	2	1	0	160
Pillion Passenger	0	0	0	4	6	5	1	0	1	0	0	0	0	17
Pedestrian	5	22	10	12	12	5	7	10	19	18	31	70	0	221
Pedal Cyclist	0	2	5	5	3	0	2	0	1	2	1	2	0	23
Other	0	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL	17	37	23	62	204	145	125	112	84	68	75	109	3	1067

Note: This table includes preliminary data for the final months of 1982/3 which is subject to minor amendment.