



LEGISLATIVE ASSEMBLY OF QUEENSLAND

PARLIAMENTARY TRAVELSAFE COMMITTEE

REPORT ON PEDESTRIAN AND CYCLIST SAFETY

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**Parliamentary Travelsafe Committee Report No. 9
July 1993**

PARLIAMENTARY TRAVELSAFE COMMITTEE

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LEGISLATIVE ASSEMBLY OF QUEENSLAND

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**REPORT ON
PEDESTRIAN AND CYCLIST SAFETY**

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CHAIRMAN'S SUMMARY

To the Honourable the Speaker and Members of the Legislative Assembly.

On behalf of the Travelsafe Committee, I present the report of the Committee on Pedestrian and Cyclist Safety.

The All-Party Travelsafe Committee was created at the instigation of the Minister for Transport and Minister Assisting the Premier on Economic and Trade Development, Hon David Hamill, MLA for Ipswich, by resolution of the House on 10th May 1990.

It was reappointed following the general election held on 19th September 1992 and continued with this report which had been commenced by the previous committee and delayed by the dissolving of Parliament.

The Committee's terms of reference included the following:

- To monitor, investigate and report on the causes of road crashes in Queensland, and issues of road safety; and
- to review and report on countermeasures aimed at reducing deaths, injuries and the social and economic costs to the community arising from road crashes or inappropriate road user behaviour.

The number of pedestrian deaths on Queensland Roads (74 last year) is a cause of great concern. The number of children killed and injured on the road is of even greater concern.

Thirty-six percent of all accidental deaths of children in Brisbane result from motor vehicles colliding with pedestrians or cycles. Serious injury is much more common than deaths (possibly 10:1) with between one third and one half of these requiring in-patient care.

The majority of road accidents involving pedestrians and cyclists are unreported and are therefore not reflected in statistics and road accident data. Data is available on nearly 200,000 incidents occurring in the Brisbane South Health Region since January 1988. This area has a population of 663,000. This information should be available from all regions of Queensland and available to Department of Transport's Road Safety Division.

Queensland is over-represented in accidents involving children, with 2% of Australia's total of such accidents occurring in Brisbane South Region.

Nearly 50% of all reported road accidents involving children, resulted in death, or serious injury which required in-patient care, and most involved head injuries. Wearing of cycle helmets should reduce these numbers.

Despite justified concerns, generated by parents and others, about the dangerous conditions outside schools, nearly 90% of accidents involving children, occur elsewhere. Twelve and a half percent involve children leaving buses and crossing the road. By far the largest group, between 25% and 33%, occur on residential streets, with sparse traffic. Speeds are too high, with the severity of injuries increasing as speeds rise above 40 km/h. Speed limits should be rigidly enforced without exception, in residential streets and precincts, where drivers have a clear indication that a reduction in speed is required.

Driveways are the location of many accidents causing injuries to children, as are shopping centres and recreation areas.

Most serious injuries and deaths (90%) of cyclists involve a collision with a motor vehicle, although faulty cycles are a considerable cause of injury. More attention should be paid to the condition of cycles, with a bell, headlight, tail light, reflectors and independent brake, being compulsory at point of sale.

On-going maintenance should be enforced with police impounding unroadworthy cycles just as other vehicles are ordered off the road.

The majority of cycle deaths and serious injury involve males (78%), with head injury again the major cause of death. A minor cause of serious injury, is the unprotected ends of handlebars.

Eighty percent of all cyclists killed or injured are under twenty years of age with 33% aged between 10 years and 14 years. Twenty-one and a half percent are aged between 5 years and 9 years. Many experts believe that no child under 10 years of age should be permitted to ride on the road. It would be very difficult or impossible to enforce a legal ban on children under 10 years of age. This would also have a major impact on many families in regional cities and country areas.

An enterprising and intensive campaign should be mounted to educate parents on their responsibility to train children on the road and to train them properly in cycle safety and road rules. Travelsafe previously recommended this in a report on Bicycle Safety, which was presented to Parliament on 28 November, 1991.

The best means of training would be to accompany children on bicycles on the road and children should be permitted to ride if accompanied by a parent or tutor. According to Mr Barry Collis of the Bike Ed section of the Education Department; "Better examples from parents and other adults is essential".

Statistics show that 67% of all accidents involving cycles and other vehicles are caused by the cyclist. This still indicates that 33% are caused by drivers and that considerable education of drivers is needed.

Road conditions need upgrading to provide a safer environment for cyclists. Improved shoulders on major roads, as provided in Department of Transport design rules, should improve this.

Local Authorities should also observe these requirements on major roads under their control. Gully traps are still a hazard for cyclists and many still have gaps in grates which run parallel to the kerb. They should be replaced with gaps at right angle to kerbs and at the same height as their surrounds. This will require increased expenditure on drainage in many instances.

Evidence was given on the worth of cycling as a means of transport and recreation. Cycling could be encouraged by:

- (1) Surveying and establishing radial routes to the inner city using secondary roads and streets, while still considering the shortest practical route.
- (2) Bike-lanes on major roads where they are wide enough to allow this.
- (3) Security of parked cycles.

(4) Facilities for cyclists such as change rooms and showers.

A number of witnesses opposed riding cycles on footpaths although most conceded that children under 10 should be allowed to do so. Children should be clearly instructed to give way to pedestrians and ride slowly and carefully on footpaths. Bicycle groups generally support the contentions that adults should not be on the footpath, unless on a bike path. Cycling on footpaths in shopping centres, and the CBD of cities and towns should be prohibited. Skateboards and rollerblades should not be permitted in those areas, and a helmet should be compulsory for all persons using this equipment.

Evidence was given that accidents involving cycles and pedestrians resulted in a high incidence of intercranial bleeding. Accidents to small children, to those with hearing or sight-impairment and to the elderly are a cause for concern. Elderly victims are at grave risk, particularly from fractures and from factors associated with immobilisation resulting from fractures.

Bike helmets should be made compulsory in all public areas including parks and shopping centres and the law amended to enforce this.

Off-road cycle facilities such as those in Townsville and Gympie and, to a lesser extent in other provincial areas, should be encouraged. They should be provided by local authorities and service groups with community committees. Education and Transport Departments would be responsible for standards, advice and support. Mobile Bike-Ed programs should continue to provide instruction around the State.

The single most effective move that could be made to reduce the rate of pedestrian accidents, is to lower the speed limit on residential streets.

Over 25% of accidents are on residential streets. It is a supportable argument that introducing a speed limit of 50 km/h would encourage many inexperienced drivers to travel slower. Last year, sixteen pedestrians were struck and killed by young drivers. Inexperienced drivers will drive up to the limit and reducing the limit should have the desired effect. Most responsible, experienced drivers now drive under the limit in that environment.

More stringent tests have now been introduced for licence tests. However, many witnesses supported the need for school-based educators to instil a philosophy of driving and road safety before anyone takes the wheel of a vehicle.

Rudimentary road safety and Bike-Ed in junior primary years is not enough. Road safety should be an on-going course through primary and secondary school culminating in a certificate which entitled the student to obtain a learners permit at the appropriate time.

TAFE courses should be available for those who do not have the necessary certificate. It is very clear that most drivers do not commence driving with a clear understanding of their responsibilities to other road users nor of the variables of behaviour that they will encounter on the road. Until this is made clear, children and the elderly will continue to be the victims of the generation gap.

Improved traffic facilities would also materially reduce the number of pedestrian accidents on major roads, both Department of Transport declared roads and council roads. More funding, particularly from Federal funds must be made available both to Department of Transport and local government, specifically for road safety devices and installations.

The delay between arriving at perceived need, e.g. "meeting the warrant" and installation, is unacceptable. Because of waiting lists in the case of Department of Transport and the more up-front Councils, and because of the negative attitude of other councils, who have no access to funds, the waiting time can average two years.

Co-ordination of traffic lights improves flow of traffic, reduces congestion and reduces accidents and should be installed on major roads to a greater extent. Intermediate interruptions to the flow of traffic such as zebra crossings and unco-ordinated signals should be eliminated wherever possible. Effective platooning of traffic makes it possible for cross traffic and pedestrians to cross busy roads in relative safety.

Central pedestrian refuges should be more commonly used, particularly on multi-lane roads.

Zebra crossings should be eliminated on multi-lane roads. They could be replaced, in many instances, with pelican crossings, which are successful overseas and in other states.

Action should be taken to approve the use of pelican crossings in Queensland, particularly on urban roads having a speed of 70 km/h or lower.

More action should be taken by local authorities, particularly when development is occurring to grade separate pedestrians and traffic on busy roads and streets. Local Authorities should be required to propose or adopt a conceptual layout of all land in a future urban situation to establish a clear hierarchy of roads that must be adhered to. The Local Government Act should make this mandatory to prevent court challenges. This would make clear provisions for public transport in new developments and obviate the need for costly LATM in the future. Efficient public transport is seen as a part of a strategy to reduce road trauma and more funds are needed to develop this service in many areas. LATM's are clearly needed in some form in most areas of Queensland and this will be addressed in a later report.

More use should be made of fencing and other structures such as planter boxes to prevent pedestrians from crossing at dangerous locations. This has been done in Melbourne, and trialled in Brisbane. A joint program with State and Local Governments and community groups in Melbourne introduces road safety discussion into elderly persons groups in the suburbs.

RBT has been used to good effect in many areas of Queensland and has been a major factor in lowering the accident rate. Evidence was given that many pedestrian victims are intoxicated, however other factors are often also involved.

There is a need to make compulsory Blood Alcohol Content (BAC) testing of all persons involved in road accidents who are treated at hospitals, both from a medical and statistical point of view. At present, doctors are reluctant and often refuse to carry out tests because of legal restraints. This matter requires urgent attention.

Many dedicated people in our community including Department of Transport, police, medical experts, the RACQ and cycling groups are striving to reduce the road toll. Much greater public awareness and more responsible attitudes must prevail if this is to succeed.

Education is the key.

Finally, I wish to acknowledge the efforts of all Travelsafe Committee Members and Committee staff, as well as the witnesses involved in the hearings and the Hansard reporters who accompanied us.

The Committee sincerely commends the report for the consideration of the Queensland Parliament.

Len Ardill, MLA
Chairman

INTRODUCTION

PURPOSE

- 1 The purpose of this report is to recommend the implementation of road safety countermeasures aimed at enhancing the safety of pedestrians and cyclists.

SCOPE

- 2 This report will be based on information gathered by the Committee from formal public hearings; from written submissions; from published literature relevant to the topic; from inspections conducted by the Committee during the inquiry; and from discussions with road safety authorities.

COMMITTEE BACKGROUND

- 3 The Travelsafe Committee of the 47th Parliament was appointed by the Legislative Assembly on 12 November 1992 to inquire into, report upon, and make recommendations in relation to all aspects of road safety in Queensland.
- 4 In appointing the Committee the Legislative Assembly determined the Committee's terms of reference to be:
 - to monitor, investigate and report on the causes of road crashes in Queensland, and issues of road safety; and
 - to review and report on countermeasures aimed at reducing deaths, injuries, and the social and economic cost to the community arising from road crashes or inappropriate road user behaviour.
- 5 Furthermore, the Committee was requested to give urgent consideration to the following matters:
 - the safety and economic implications of permitting standees on buses for both urban and non-urban services; and
 - the desirability of requiring compulsory third party insurance cover for boats and trailers.

STANDARD INQUIRY PROCESS

- 6 Travelsafe Committee Members strongly believe that one of the Committee's prime roles is to be a mechanism through which members of the public can contribute to the development of road safety countermeasures. The inquiry and consultation process adopted by the Committee consists of:
 - announcing the inquiry and calling for public submissions through advertisements;
 - conducting public hearings in Brisbane and regional centres of Queensland;
 - inspections in Queensland and other states;

- consulting available research which is relevant to the topic of the inquiry;
- collating all information gathered through this process and producing a report, with recommendations, for presentation to Parliament.

PEDESTRIAN AND CYCLIST SAFETY INQUIRY PROCESS

- 7 The Committee's inquiry on **Pedestrian and Cyclist Safety** was commenced by the Travelsafe Committee of the 46th Parliament in May 1992. Public Hearings were held in Cairns on Monday 27 July 1992 and Maryborough on Thursday 30 July 1992. Both hearings were specific to pedestrian and cyclist safety. With the announcement of the state election in August 1992, and the subsequent dissolution of Parliament in preparation for the election, all Committees were also dissolved. As a result, the Committee's inquiry on pedestrian and cyclist safety was suspended until the Travelsafe Committee was re-established in November 1992.
- 8 The Travelsafe Committee of the 47th Parliament resolved to conclude any unfinished inquiries of the previous Committee. All people and organisations who had provided written submissions to the Committee were notified that the new Committee was resuming this inquiry. In addition, all people who were originally invited to provide a submission, but had not yet done so, were also contacted and told of the Committee's resumption of this inquiry. Public hearings were subsequently held at the Gold Coast on 22 March 1993; in Brisbane on 27 and 28 April 1993; and in Rockhampton on 29 April 1993.
- 9 Advertisements announcing the inquiry and calling for submissions were placed in major newspapers on 30 and 31 May 1992 and major regional Queensland newspapers on 5 and 6 June 1992. A copy of this advertisement is shown in Appendix A. The closing date for submissions was Monday 29 June 1992, however, late submissions were accepted and considered. The names of organisations and individuals who provided submissions are listed in Appendix B. Witnesses who appeared at all public hearings pertinent to this topic are listed in Appendix C.

OBJECTIVE OF THE REPORT

- 10 The Committee sees two prime roles of this report to be to generate debate and to facilitate investigation, evaluation and implementation of appropriate road safety countermeasures. Whether recommendations of this report are adopted and implemented OR whether the report causes other options to be investigated and implemented; this report will have achieved one of its objectives. That is, to stimulate action and effect changes which will enhance the safety of pedestrians and cyclists.
- 11 This report will focus on utilising and analysing the information made available to it in submissions and evidence, discussions and inspections. It is not the intention of this report, indeed it is beyond the resources available to this Committee, to enter into a detailed written analysis of available literature relevant to the inquiry topic. Literature will be referred to when necessary.

RESPONSIBILITY OF MINISTERS

- 12 This report makes recommendations for the Government to implement. It is the Committee's belief that implementation of the recommendations will enhance the safety of pedestrians and cyclists. The resolution which re-established the Travelsafe Committee in November 1992 requires the responsible Minister or Ministers to respond to a Committee report. Specifically the resolution states:

"that where a report of the Committee recommends that a particular action be taken by the Government with respect to a matter, the appropriate Minister of the Crown shall, within a period of not more than six months after the tabling of the report in the Legislative Assembly, table a written report in the Legislative Assembly as to the action (if any) taken or proposed to be taken by the Government with respect to the recommendations of the Committee. If the Legislative Assembly is not sitting at the expiration of the six month period, the report is to be tabled at the next sitting of the Legislative Assembly."

STRUCTURE OF THIS REPORT

13 This report will be structured on an issue basis. Many issues emerged throughout the inquiry, all of which are worthy of their own report, and they will be dealt with under specific headings. The headings are:

- The Extent of the Problem
- Data Collection
- Road Safety Education
- Speed Limits
- Engineering
- Road Hierarchies and Planning
- Footpath Cycling
- Promotion/Publicity
- Enforcement of Traffic Laws on Cyclists
- Safety Features of Bicycles
- Infrastructure/Facilities for Cyclists
- Prevention Programs
- Strategic Outlook

THE EXTENT OF THE PROBLEM

- 14 It is believed that an estimated 25% of all Queenslanders cycle regularly and that bicycle trips account for approximately 7% of all vehicular trips. About 2% of all journey to work trips in urban areas of Queensland are being made by bicycle. On a national level, annual sales of new bicycles exceeds annual sales of new motor cars with bicycle sales increasing by 7% each year. Half of all Australian households are believed to have a bicycle.
- 15 When examining the extent of the pedestrian and cyclist accident and injury problem in Queensland, it is important to consider statistics over a period of several years. Table 1 below shows the number of road fatalities by road user type in Queensland between 1986 and 1991 (Queensland Transport 1992, p. 10).

**TABLE 1: FATALITIES BY ROAD USER TYPE,
QUEENSLAND 1986-1991**

Road user type	1986		1987		1988		1989		1990		1991	
	No.	%										
Drivers	186	39	165	37	225	42	173	40	162	41	162	41
Passengers	133	28	125	28	156	29	117	27	106	27	110	28
Motorcyclists	82	17	65	15	59	11	51	12	45	11	41	10
Bicyclists	15	3	14	3	21	4	19	4	16	4	16	4
Pedestrians	65	14	73	17	78	14	68	16	66	17	66	17
Total	481	100	442	100	539	100	428	100	399	100	395	100

- 16 Table 1 shows that the total number of persons killed on Queensland roads decreased by 18% between 1986 and 1991. (The 1988 road toll was uncharacteristically high, reflecting increased road activity associated with Expo 88 and accompanying events). However, the absolute number of cyclists and pedestrians killed in 1991 were similar to the numbers of each road user group killed in 1986, despite some variations in the numbers of fatalities per year over that period. Cyclists accounted for a similar proportion of the road toll in 1991 (4%) as in 1986 (3%). Yet, pedestrian representation in the road toll increased from 14% in 1986, to 17% in 1991.
- 17 Table 2 shows the number of hospitalised casualties by road user type resulting from reported accidents on Queensland roads between 1986 and 1991 (Queensland Transport 1992, p. 11).

TABLE 2: HOSPITALISED CASUALTIES BY ROAD USER TYPE, QUEENSLAND 1986-1991

Road user type	1986		1987		1988		1989		1990		1991	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	1482	37	1562	39	1605	38	1512	38	1627	42	1425	40
Passengers	1199	30	1167	29	1270	30	1156	29	1020	26	1068	30
Motorcyclists	728	18	612	15	671	16	552	14	511	13	492	14
Bicyclists	239	6	265	7	328	8	297	8	302	8	241	7
Pedestrians	375	9	361	9	371	9	426	11	433	11	341	10
Total	4023	100	3967	100	4245	100	3943	100	3893	100	3567	100

- 18 The number of road users admitted to hospital as a result of crashes on Queensland roads also decreased between 1986 and 1991 (by 11%), as shown in Table 2. Despite some variation in the absolute numbers of cyclists and pedestrians hospitalised per year over the six year period, their representation of total hospitalised casualties has remained relatively constant during this time. On average, cyclists have represented 7% and pedestrians have represented 10% of total hospitalised casualties. Note, pedestrians comprise a greater proportion of fatalities than of hospitalised casualties which indicates a greater likelihood of pedestrians being fatally injured in road crashes.
- 19 In its submission to the Committee, Queensland Transport said (p.2) *"the young and elderly are over-represented in crashes involving injuries, as are road users affected by alcohol."* This referred to both pedestrians and cyclists, grouped in the submission as Unprotected Road Users. The submission also stated that: *"In 1990, pedestrians made up 32% of the road user fatalities with a BAC concentration of more than .05%. In 1991, 19% of all alcohol affected road user fatalities were pedestrians"* (p.3). At a national level, Babic and Graham (1993, p.1) state the 1990 Federal Office of Road Safety Fatality File shows that 33% of pedestrian fatalities were alcohol affected.
- 20 For pedestrians, 30% of accidents occur after dark. Queensland Transport stated the majority of *"pedestrian accidents in Queensland are mid-block, involve vehicles travelling straight ahead and are on straight, level roads"* (p.3).
- 21 The submission from Queensland Transport (p.4) provided information of the age groupings of people involved in bicycle accidents in Queensland during 1990 and 1991. As shown in Table 3 below, more than one third of those people involved in bicycle accidents during 1990 and 1991 were aged 11-16 years.

Table 3:

**AGE FACTORS IN
BICYCLE CRASHES
QUEENSLAND
1990-1991**

Group	Per Cent
0-10	11%
11-16	35%
17-24	25%
25-59	21%
60+	8%

22 Other pertinent facts, stated in the submission (p.4) are:

- bicycle accidents usually occur at intersections with one (1) party making a turn or changing speed;
- a high proportion of bicycle accidents occur during normal daylight hours; and
- a large number of bicycle accidents occur in the first half of the year, predominantly in February and March.

23 Report CR105, The Federal Office of Road Safety report on an analysis of the 1988 Fatality File for different types of fatal road crashes across Australia, states that pedestrian crashes in 1988 represented *"20% of all fatal crashes and 19% of road fatalities in Australia that year"* (p.10). In total, 1988 saw 535 crashes involving pedestrians with 542 pedestrians killed, making pedestrians the third largest fatality group in Australia (P.10). Cyclist crashes in 1988 represented *"3% of all fatal crashes and 3% of road fatalities in Australia that year"* (p.34). In total, 1988 saw 85 crashes involving cyclists with 86 cyclists killed (p.34).

24 In summary, the same categories of pedestrians and cyclists are at most risk; the young and the elderly. Alcohol affected pedestrians are also a high risk group. In addition, *"a high percentage of fatal pedestrian crashes occurred between 3 pm and 8 pm ... (with) an after school peak observed on weekdays"* (FORS, CR104, p.9). Similarly, *"bicycle crashes peaked after school on weekdays ... between 3 pm and 6 pm"* (p.33). Not unexpectedly most fatal crashes for both groups occur in urban areas.

DATA COLLECTION

- 25 The Committee consistently received information both in written submissions and in evidence that methods and extent of data collection on pedestrian and cyclist injuries were inadequate. It appears to be a widely held belief amongst road safety researchers that the official police data on all type of road accidents is not completely accurate. The main problem with the official data appears to be that it does not present a full and accurate picture of the road safety problem. This is particularly so in the case of accidents involving pedestrians and cyclists. Many accidents involving these categories of road users are not reported to the police and subsequently do not figure in data collection for these types of road users.
- 26 One of the likely reasons for pedestrian and cyclist accidents NOT being reported is the level of property damage (to the value of \$2,500) required in non-fatal accidents before an accident is required to be reported. Consequently, a high number of unreported pedestrian and cyclist accidents is to be expected with little chance of a non-fatal pedestrian or cyclist accident causing \$2,500 property damage, and, therefore being reported. In its submission, Queensland Transport (p.18) states:
- "It is recognised at an international and national level, that information and data capture as it relates to unprotected road users is deficient."*
- 27 The submission further states that separate studies have estimated the under-reporting of bicycle accidents to be approximately 30 to 1 with pedestrian accidents under-reported by about 20% (p.18).
- 28 During this investigation the Committee commissioned a consultancy with the Queensland Injury Surveillance Prevention Project (QISPP). This organisation operates out of the Mater Children's Hospital and collects data from the Accident and Emergency Departments of 7 hospitals in the Brisbane South Health Region.
- 29 For this study, QISPP selected the records of pedestrians and cyclists injured in accidents. There were 1,233 pedestrian related injuries and 5,431 cyclist related injuries since data collection began in 1988. Copies of the QISPP Reports are appended to this Committee's report (Appendices D & E).
- 30 The report on *"Injuries to Pedestrians"* showed that the elderly are NOT over-represented in non-fatal accidents. The age group most at risk in this type of accident was the 5-9 year age group with people in the 10-19 year age group also at significant risk. Both groups were at greater risk than adults of any age (p.10).
- 31 Not surprisingly, the QISPP report showed that most pedestrian injuries occur on public roads with children in the 5-9 year age group prominent in these accidents (p.10). The QISPP study supports the need for injury prevention programs to be targeted at this age group. Many pedestrians were injured on a designated road crossing.
- 32 Accidents on driveways also showed as a major accident type with children in the 0-4 year age group at most risk (p.10). Unexpectedly, many adults were also injured at this site.

- 33 The report makes several recommendations based on analysis of the data collected. The recommendations are aimed at preventing the injury through prevention of the accident. Significantly, one recommendation noted the reduced severity of injuries from accidents which occurred where vehicle speeds were reduced. Lower speeds in residential areas is seen as a preventive measure to reduce the number and severity of accidents in residential streets.
- 34 The second report from QISPP, "*Injuries to Cyclists*" also reveals a number of issues. It notes that collisions between motor vehicles and cyclists are the main cause of fatal bicycle accidents. This is not dissimilar to analysis of reported accidents. The report indicates that a large number of cyclist accidents are NOT reported to Police. Many of these accidents occur on public roads or at places where cyclists mix with other traffic. The report also reinforces the effectiveness of bicycle helmets in reducing the number of fatalities and injuries. Finally, the report shows that children under 15-16 are over-represented in cyclist accidents with the 10-14 age group most at risk.
- 35 Both reports by QISPP clearly show that whilst the official Police data may accurately reflect the fatal accident problem, it is not a full and accurate presentation of the total pedestrian and cyclist accident problem. The reports show that many unreported accidents do occur and that, like the official data, certain trends emerge. These trends are useful in determining the nature and extent of countermeasure development. While this data only refers to one (1) State Health Region, Brisbane South, it is the most populous health region in Queensland. Similar data collections in all other Queensland Health Regions would provide a state-wide picture of the extent of unreported pedestrian and cyclist injury accidents. Significantly, Dr Glen Merry, Chairman of the Queensland Road Trauma Committee of the Royal Australasian College of Surgeons, supported the need for better data collection.
- 36 In evidence, Dr Merry recommended better data collection at both National and State levels. This would provide valuable additional information on the types of accidents, and the conditions under which they occurred (Evidence 28.4.93, p.91). Dr Merry also stated that better, more extensive data collection would determine injury patterns which occur as a result of certain types of accidents. Additional data on the type of treatments given for certain injuries, and their relative success, would also aid the establishment of optimum treatment strategies or protocols (Evidence 28.4.93, p.92). Dr Merry informed the Committee that the National Road Trauma Advisory Council (NRTAC) has appointed a working party to establish a trauma system for Australia. The system will consider prevention, pre-hospital care, acute hospital care, outcome, data collection and rehabilitation. Dr Merry believes that uniform data collection at a National and State level will *"correlate the three big areas ... the causes in much more detail on the patterns of injury that we observe, the efficiency of treatment and the outcome, and then make the whole thing cost effective"* (Evidence 28.4.93, p.92).
- 37 Associate Professor Fred Leditschke, representing the Child Accident Prevention Foundation of Australia at the public hearing on 28 April 1993, also called for better data collection. In his submission he referred to data in relation to the frequency of cycle accidents being obtained from QISPP under the co-ordination of Dr Rob Pitt of the Mater Children's Hospital. Associate Professor Leditschke believes considerable under-reporting of bicycle accidents does exist and the data collected by QISPP captures injury data on unreported accidents.
- 38 The Committee also believes that Blood Alcohol Content (BAC) testing of people involved in road accidents requires further investigation. In evidence, Dr Merry called for BAC testing for anyone over the age of 15 who is involved in a road accident (Evidence 28.4.93, p.90). This is the policy of the Royal Australasian College of Surgeons. From a medical perspective, a BAC test assists with injury treatment and also would be useful in determining whether the level of alcohol consumed by a person affects the severity of injuries sustained. However, medical practitioners will normally only perform BAC tests if they need this information to assess the most appropriate form of treatment for the injury. If the results of the BAC test is to be used for legal purposes, doctors may refuse to perform them or refuse to release the results of the test. Legislation

which protects doctors who perform a BAC test, the results of which may be used for legal purposes, would be required if BAC testing of all road accident victims is performed. An amendment to the Traffic Act, passed in 1974 but never assented to, and therefore has never become law, deals with this very issue. The Committee understands that subsequent attempts to have the amendment become law, have also failed. This matter should once again be investigated with a view to obtaining appropriate legislation which protects doctors from any legal implications; which provides for the tests to be performed; and which allows the data to be collected and used in the manner as outlined by Dr Merry.

- 39 As stated at the beginning of this section, the official road accident data is widely believed to be inaccurate and incomplete. This is largely because many minor accidents are not reported to Police. Data collections, such as those gathered by QISPP, are useful and valuable additions to the official data and should be used by road authorities to assist in the development of preventive strategies and road safety countermeasures. Wider implementation of this method of data collection would provide road safety authorities with a more complete and more accurate picture of the road accident problem. This is particularly so for pedestrian and cyclist accidents which are held to be grossly under-reported. Blood Alcohol Content testing of all people over 15 involved in an accident would assist the medical profession to develop better treatment strategies and provide further information on the extent of the impact of alcohol on road accidents. However, doctors may need legislative protection to perform these tests.

Recommendation 1

The Committee recommends that more comprehensive data collection systems be developed so that information on unreported road accidents, much of which is available from the Accident and Emergency department of major hospitals, is utilised in analysing road accidents. This would be particularly useful for gathering data on accidents involving pedestrians and cyclists. Combined with the official Police data on reported accidents, a more comprehensive and accurate picture of the road accident problem, would emerge. The system used by the Queensland Injury Surveillance Prevention Project (QISPP) is an example of one method of capturing this data.

Ministerial responsibility:

- Minister for Transport
- Minister for Health

Recommendation 2

The Committee recommends that the Traffic Act be amended to permit Blood Alcohol Content (BAC) testing of persons who attend hospital for treatment of injuries sustained in fatal and/or injury road accidents. This would assist in establishing correct medical procedures and in statistic gathering which is essential for road safety purposes.

Ministerial responsibility:

- Minister for Transport
- Minister for Health

ROAD SAFETY EDUCATION

- 40 An earlier report of the Committee (Report No.3) made several recommendations regarding road safety education in Queensland schools. During this inquiry, formal, structured, curriculum-based road safety educational programs, was consistently put forward as one part of a package to reduce road trauma. The Committee continues to believe that curriculum-based road safety education is needed.
- 41 Increased use of curriculum-based road safety programs is supported by "*The Queensland Road Safety Strategy*" (p.11), developed by Queensland Transport, under a strategy of:
- "Nurture a younger generation of more aware and safer road users."*
- 42 The Strategy proposes continued implementation and development of curriculum-based road safety programs for all children from pre-school to, and including, secondary school. Ways of improving the Student Driver Education Course will also be examined under the Strategy.
- 43 From the evidence presented to the Committee, it is clear that pedestrians and cyclists are at risk through their own behaviour. However, they are also at risk from the behaviour and attitude of other road users. For example, pedestrians and cyclists can be perceived by motorists as not having any rights and responsibilities on the road and may be treated accordingly. A strategy of broadening the education process, through curriculum-based education and targeted programs, must seek to address these behavioural and attitudinal concerns throughout the community.
- 44 Motorists, pedestrians, cyclists, parents and school children all require road safety programs relevant to their age and stage of development. These programs should aim to alert them to the dangers facing them as they grow older and become different types of road users.
- 45 For example, the Committee believes that better, perhaps compulsory, driver education would better prepare motorists for dealing with unexpected situations arising out of deviant behaviour of some pedestrians and cyclists. For children and the elderly, this deviant behaviour may occur as a result of their difficulty in judging vehicle speed and distance. A feature article, "*Pedestrian Casualties in 1992*", in the Monthly Status Report on the Queensland Road Toll produced by Queensland Transport (No.20, 10.2.93) states:
- "Young adult drivers in particular appear to lack knowledge of the mobility and evasive behaviour that a pedestrian may take."*
- 46 The article also states that road users between the ages of 17 and 21 were involved in over 20% of pedestrian casualty crashes during 1992. The young adult was a driver in 60% of these crashes and a pedestrian in the other 40% (p.2). To support this, and the earlier statement, the article says that 9 out of 16 pedestrians killed by young adult drivers in 1992 were elderly (p.3).
- 47 Significantly, the article identifies education and publicity programs targeted at high-risk groups, and at modifying driver behaviour, as worthwhile countermeasures (p.3). It is important they be used in conjunction with the other effective engineering and enforcement countermeasures.

- 48 A study by Arnold, Rosman and Thornett analysed characteristics of pedestrian crashes in Western Australia during 1988. The study considered both the pedestrian and cyclists involved (1992, p.61). One of the conclusions drawn by the authors was *"drivers need to be aware that the risks of having various types of crashes differ according to location"* (p.74). By this they mean that *"drivers need to employ hazard assessment strategies which accord greater weight to the likely hazards in each driving context, rather than relying upon a single, all-embracing strategy for assessing hazardousness"* (p.74).
- 49 Furthermore, much evidence was heard by the Committee calling for motorists to be better educated and better skilled. That is, motorists need to be better educated on the safety needs and concerns of pedestrians and cyclists and to be better skilled at hazard detection and accident avoidance. Elliott (1991, p.190) comments that research literature on driver education recommends refraining *"from introducing compulsory driver education courses unless they are developed, implemented and evaluated extremely carefully."* He also says (1991, p.190): *"of course, driver education per se, cannot be rejected; only driver education as currently practised."*
- 50 The Committee agrees that driver education programs must be very carefully designed, implemented and evaluated. Although doubt does exist about their effectiveness and subsequent impact on crash reduction, the Committee believes driver education to be extremely important in enhancing the safety of pedestrians and cyclists. The problems faced by very young and elderly pedestrians, and the unpredictable movements of cyclists, have been previously mentioned. Drivers must be educated on how they can be alert to potentially dangerous situations involving pedestrians and cyclists; they must be educated on the safety issues which face pedestrians and cyclists; and they must be educated in appropriate skills to avoid an accident with a pedestrian or cyclist. If driver education has been poorly designed and implemented in the past, authorities need to ensure that current courses are rigidly evaluated, and re-designed if necessary, to determine if they achieve desired behaviour modification. Certainly the Queensland Ambulance Service believes driver education and training to be effective. A number of Ambulance officers are trained in enhanced driving skills at *"Roadcraft — Queensland Driver Training Complex"* in Gympie. This centre does excellent work and continues to provide a much needed service despite operating under difficult financial arrangements.
- 51 Queensland Transport just as certainly believes driver education and training to be effective as evidenced by their complex at Mt Cotton. Furthermore, many transport companies report significant decreases in crash rates amongst their drivers after they have completed an advanced driver education and training course.
- 52 A significant body of literature exists on road safety education. Elliott (1985) commented that *"whilst education is only one counter-measure, it has evoked by far the greatest amount of public material"* (p.167). Elliott also listed a series of questions (1985, p.167) about road safety education which he believed needed to be addressed. Most commentators believe road safety education is necessary and that it is but one component of a larger package of countermeasures. However, doubt exists about whether road safety education is actually effective in making people become safer road users.
- 53 This Committee believes road safety education is essential if road users, of all ages, are to be encouraged to adopt safer practices. However, road safety education must be carefully designed to achieve optimum results. The Social Development Committee (1986, p.52) *"identified six essential design features which can be used to evaluate the instructional strength of traffic safety education and training activities in Victoria:*

- (i) *a sequential learning program, spanning all school years and building on prior learning experiences;*
- (ii) *continuous instruction over the school year;*
- (iii) *a mix of curriculum-integrated and discrete activities, to provide a diversity of learning experiences;*
- (iv) *opportunity to develop and practise practical road use skills;*
- (v) *instruction tailored to the physical and mental stage of a child's development, and reflecting their interests and experiences; and*
- (vi) *instruction by positive role models, particularly parents, to support the learning of their children and modify their own traffic behaviour."*

54 Once designed and developed, programs must be delivered in a manner which facilitates widespread program implementation. On this point, the Social Development Committee (1986, p.53) observed:

"Many submissions from parents and school councils recommended that traffic safety education and training activities be made a compulsory feature of the school curriculum. The optional nature of these activities was seen as contributing to their low rate of adoption. This view was supported by evidence that the adoption of traffic safety education and training activities by some schools required the occurrence of a serious accident in the local area, or at the very least, the fortuitous arrival of an interested staff or school council member."

55 Similarly, the Travelsafe Committee was consistently told, in submissions and evidence, that more widespread road safety education was needed to help address the pedestrian and cyclist accident problem. The Committee firmly believes that school-based road safety education programs must be integrated into the school curriculum if they are to achieve their stated aims of modifying road user behaviour. Naturally, any such programs must be carefully designed and evaluated.

56 One example of the way in which road safety education programs are implemented in Queensland schools is the Bike-Ed program. Whilst all schools receive Bike-Ed kits, it is dependent upon teachers at the school to show sufficient interest in the topic, for this resource to be effectively utilised. Mr Barry Collis, Road Safety Co-ordinator from the Department of Education, arranges for seven (7) Department of Education owned bicycle trailers (Queensland Transport also has trailers co-ordinated by Queensland Transport regional offices), complete with bikes, helmets, witches hats and signs, to be rotated throughout Queensland schools. Schools make a booking, usually for a two (2) week period, and teachers and/or parents from the school are trained in how to deliver the Bike-Ed course. Mr Collis believes the Bike-Ed program is working quite well. However, the Committee is concerned that the available resources for delivery of the program are insufficient to ensure widespread teaching of the program.

57 The submission from Queensland Transport states Queensland Transport's approach to road safety education in this State is *"to provide high quality, readily accessible material which can be used by teachers in the classrooms in many different situations"* (1992, p.14). The submission also says that the material is designed for flexible application and high student interest, and is developed with the assistance of specialist curriculum staff from the Department of Education (p.14). Programs which have been developed, or planned for development, are listed in the submission.

58 It is not the development process, design or content of the road safety program material which are of concern to the Committee. Rather, it is the manner in which they are delivered. Whilst program kits are made available to all schools, in-service training for teachers and/or parents is only provided on request. The impetus for a request may come from the Principal, a teacher or a parent. However, schools which do not request in-service training so that the program/s can be delivered, do not receive any training. In these cases, the Committee wonders what use is made of the program material. The Committee understands that the lack of widespread in-service training is a product of the education method adopted to deliver the road safety

programs; not the result of the inability or unwillingness of Queensland Transport or Education Department officers to deliver the appropriate in-service training. In this regard, the Committee acknowledges the dedication, sincerity and application to this enormous task shown by officers like Mr Barry Collis and Queensland Transport officers involved in program material production. However, program delivery needs to be more systematic; more pro-active; more formalised; and part of the education curriculum and these officers should also be involved in facilitating this process.

59 The Joint Standing Committee on Road Safety in the New South Wales Parliament, the Staysafe Committee, made the following recommendation in "*Staysafe 12 - Bicycle Safety*" (p.20):

"That educational materials aimed at bicycling safety continue to be aimed at:

- being attractive to teachers and students;*
- utilising the results of diligent research;*
- employing educational principles; and*
- integration into mainstream subject areas."*

60 Notably, the above recommendation calls for bicycle safety educational materials to be integrated into mainstream subject areas. The Committee considers that this could be taken further with the development and establishment of a separate subject teaching road safety.

61 The Committee have previously recommended (Report No. 5) the establishment of off-road bicycle training facilities in provincial cities or towns in Queensland. In the Committee's opinion, these facilities should be modelled on those centres already established in Townsville, Maryborough and Gympie. The Committee continues to believe that the establishment of these facilities is worthwhile.

62 The Committee supports a continuation and wider implementation of the Bike-Ed program. Similarly, the Committee believes that all drivers should be educated in safety issues which impact all road users, but particularly pedestrians and cyclists. Hazard detection, accident avoidance techniques and an increased awareness of the vulnerability of pedestrians and cyclists could all be taught to drivers as part of a comprehensive, well-designed, carefully implemented driver education and training program.

63 The Committee believes that formal curriculum-based road safety programs throughout the school years would better prepare new drivers for the plethora of hazards and driving conditions they will face. These programs should be supported by on-going promotional programs and publicity to continually remind drivers of the behavioural characteristics of different road users. Other programs, developed for and targeted at all other road users, but particularly pedestrians and cyclists, should also be developed and implemented.

Recommendation 3

*The Committee recommends that **all** Queensland primary schools have a sufficient number of teachers who have been trained in how to teach the Bike-Ed program. The Department of Transport and the Department of Education should then investigate ways of incorporating the Bike-Ed Program into the education curriculum to ensure that **all** Queensland primary school children receive bicycle education. The program should also emphasise the impact and safety needs of other road users. Furthermore, training in how to teach Bike-Ed should be a compulsory component of tertiary teacher training courses.*

Ministerial responsibility:

- Minister for Transport
- Minister for Education

Recommendation 4

The Committee recommends that other road safety instruction should continue throughout Primary School. Road Safety should be taught in high school as a formal subject of the education curriculum. Completion of the appropriate road safety subject/s would lead to a certificate in road safety. For those without a certificate, or those who do not complete high school, a TAFE course should be developed and available. The certificate from High School or the TAFE course would be a pre-requisite to obtaining a learner's permit for driving.

The High School subject and TAFE course developed should teach a philosophy of safe driving, safe road behaviour at all times, and prepare people for driving amongst, and coping with, all road users, BUT particularly pedestrians and cyclists. Course participants need to be made aware of the role of speed in increasing the severity of injuries, and the behaviour, actions and other factors impacting on the safety of pedestrians and cyclists.

Ministerial responsibility:

- Minister for Transport
- Minister for Education
- Minister for Employment, Training and Industrial Relations

Recommendation 5

The Committee recommends that Local Authorities and community groups of large provincial cities or towns be encouraged to establish off-road bicycle training areas, on the model of existing facilities in Townsville, Maryborough and Gympie.

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning

SPEED LIMITS

- 64 The Travelsafe Committee has previously recommended (Report No. 3) changes to existing speed limits. This process must necessarily include a review of existing posted speed limits on all roads to determine how appropriate they are for the traffic conditions, road quality and road environment.
- 65 During this inquiry, it quickly became obvious to the Committee that a lower speed limit (as recommended in the earlier report) in residential streets would dramatically enhance the safety of pedestrians and cyclists in these areas. Mr Michael Bryan, Chairman of the Cairns/Mulgrave Bicycle Safety Advisory Committee stated that traffic calming and speed reduction were important factors for the safety of pedestrians and cyclists (Evidence 27.7.92, p.8 and Submission). Senior Sergeant Errol Dellit, located at the Queensland Police Traffic Branch at Coomera, supported a 50 km/h speed limit for suburban areas (Evidence 23.3.93, p.40). Sergeant David Lambert of the Queensland Police Traffic Accident Investigation Squad supported a 40 km/h speed limit for residential areas (Evidence 27.4.93, p.20) The Chief Superintendent of the Queensland Police State Traffic Support Group, Alan Honor, believes the establishment of credible, realistic and appropriate speed limits and speed zones should be a pre-requisite to enforcement (Evidence 27.4.93, p.21). Finally, the Bicycle Institute of Queensland supports the lowering of speed limits on residential streets due to the presence of young riders and the narrowness of some streets (Evidence 28.4.93, p.50).
- 66 In his paper delivered at a recent conference, Professor Taylor recalled a comprehensive review of European studies conducted by Ray Brindle. Taylor (1993) summarises Brindle's findings by saying:

"He (Brindle) concluded that lower speeds were essential if traffic safety in residential areas was to be improved. The principle of lower speed limits was widely accepted and practised in Europe, and to some extent in Australia, with the proviso that lower residential speeds (eg 40 km/h or less) seemed unlikely to be achieved without the introduction of physical changes to the street environment."

- 67 In looking at the ability of area-wide traffic schemes to reduce the number of accidents in Great Britain, Proctor (1991) found that of the many factors contributing to urban traffic accidents, *"one of the most important injury causation mechanisms is the closing speed of the impact itself and the relative vulnerability of the parties involved"* (p.566). Significantly, 95% of pedestrian accidents in Great Britain occur in urban areas. This is similar to the pattern in Australia. The Federal Office of Road Safety Fatality File 1990 reveals that, at a national level, most pedestrian crashes occur in urban areas in the afternoons and evenings (Babic and Graham 1993, p.1). The report on pedestrian injuries prepared for the Committee by QISPP found that (1993, p.12):

"Pedestrian injuries at locations where vehicle speeds are reduced were less severe. Lower vehicle speeds on suburban roads and streets could be expected to lead to a reduction in pedestrian injuries."

- 68 Proctor stated that the chances of a pedestrian being killed when hit by a vehicle rise dramatically as the speed of the car increases (1991, p.566). He supports this by saying *"the probability of a pedestrian fatality is 5 percent at 20 mph, rising to 37 percent at 30 mph and to 83 percent at 45 mph."* Proctor further states that *"a reduction in motor traffic speed to 20 mph would not only reduce the levels of pedestrian injuries sustained in collisions, but also give both parties a better chance of avoiding the collision in the first place"* (1991, p.566).
- 69 The Committee firmly endorses this statement. Lower urban speed limits, means reduced severity of accidents and reduced numbers of accidents. In its submission, Queensland Transport (1992, p.11) reveal

some of the benefits of setting appropriate speed limits:

"The severity of crashes increases exponentially with speed. Hence appropriate speed limit reductions generate large casualty reductions. Based on this, consensus best practice for the setting of speed limits (European High Level Expert Group, 1990) recommends the speed zoning approach. This (i) systematically surveys the road network to remove ad hoc limit changes; (ii) reduces speed limits in residential areas; (iii) increases limits for some urban arterials; and (iv) reduces limits on some lower-standard rural minor roads. Australian technology (the VLIMITS expert system) enables the systematic setting of speed limits based on objective criteria. The VLIMITS system should be used to speed zone the entire Queensland road network. Such an approach would target approximately 40 per cent of crash social costs, with an expected crash reduction of six percent points. This represents annual social cost savings of \$42 million an estimated benefit/cost ratio of over 30:1.

The reduction of speed in urban areas will benefit unprotected road users by reducing the speed differential between motorised vehicles and bicyclists and pedestrians."

- 70 However, it is a commonly held belief that signing alone will not work and lower speed limits must be supported by physical devices. With regard to the use of enforcement to support signage for lower speed limits, one conclusion of the Unley 40 km/h trial suggested that *"a lower speed limit need only be supported by low level 'sustainable' enforcement programs"* (Taylor 1993).
- 71 Under a heading of "Recommendations", a RACQ Speed Limits Survey conducted in 1992 suggested *"setting the speed limit in local residential streets to 50 km/h in preference to 40 km/h if there are no devices installed to alter the Streetscape"* (Wikman and Sims, p.39). The survey also showed that the average of male and female responses for appropriate speeds in local residential streets was 52 km/h (p.13). The RACV, in a submission to the Social Development committee of Victoria during its inquiry into speed limits in that State, *"supported a reduction in local road speed limits to 50 km/h with 40 km/h being reserved for specific locations on residential streets such as near school crossings"* (1992, p.1).
- 72 In attempting to summarise the debate on an appropriate lower speed limit for urban and/or residential areas, the Committee notes and accepts the belief that lower speed limits must be supported by physical devices to achieve real reductions in actual speed travelled. This is particularly so with 40 km/h speed limits.
- 73 The Committee also notes that New South Wales is moving to a 50 km/h speed limit on metropolitan roads with 40 km/h zones, currently used around school, being extended to shopping centres and hospitals (Owner/Driver Magazine, May 13 1993, p.3). Certainly, the national trend is to 50 km/h instead of 60 km/h as a general urban limit. In the Committee's opinion, 50 km/h is an achievable compromise. A reduction from 60 km/h to 40 km/h is too dramatic a change for the Australian culture to accept, and indeed, to actually practise.
- 74 In the Committee's opinion, a lower general urban street speed limit of 50 km/h should apply so that all motorists know that, upon leaving a higher speed arterial road, a different and lower speed limit applies. This would be one component of a speed zoning philosophy and part of an overall speed hierarchy. The intended effect is to reduce the danger to pedestrians and cyclists in urban streets by lowering the speed limit in those areas. Higher speed limits on designated streets would encourage motorists to use these higher speed streets and would limit movement through lower speed streets to local traffic. Appropriate signage on those streets and roads which have a speed limit other than the general urban speed limit of 50 km/h, will be necessary. A lower speed limit of 40 km/h which is mainly used around schools and in some other signed areas, should still apply and be extended to include shopping centres, hospitals and areas of high levels of pedestrian activity.
- 75 The Committee was also informed that many accidents involving school children occur in the residential

streets which surround the schools not directly outside the schools. That is, the "feeder" area for the school is where accidents involving school children occur. A lower speed limit of 50 km/h should apply to the residential areas from which the schools draw the majority of their students. This is particularly applicable where schools are in the midst of residential development. Schools, and their surrounding areas, on arterial roads or highways should still be considered for treatment. Factors for consideration would include:

- identifying commonly used routes to and from school for the majority of children attending that school;
- identifying the mode of travel to and from school for the majority of school children attending that school; and
- identifying previous accident sites.

76 The information would assist in the determination of an appropriate speed limit for the areas surrounding the school.

77 It was also stated at the recent Australian Bus and Coach Association Conference on the Gold Coast (9-14 May 1993) that a very high percentage of accidents around schools (and the nearby residential areas) occur when children alight from, or walk/run to public or private transport. Lower speed limits would help reduce the number and severity of these accidents.

78 The Committee also heard evidence on the application of lower speed limits around schools under the Schoolsafe Program implemented by Queensland Transport. Whilst the Committee applauds the program concept and its objectives, concerns are held for the effectiveness of some aspects of the program. These concerns mainly focus on:

- varying sizes of lower speed limit signs around schools;
- location of the speed limit signs;
- the large amount of information displayed on the speed limit signs;
- the times when lower speed limits apply; and
- the likelihood of a decreasing impact and relevance of the signs, over time, for motorists driving in the area, particularly if the signs are not supported by any engineering devices which demand lower speeds for safe travel.

- 79 The Committee understands that sign sizes are allowed to vary within limits. This should not be permitted and all signs should be of one (1) standard size (preferably the upper limit of the current size). Some signs are poorly located behind trees and close to other signs or are not far enough in advance of the area where motorists should be driving at reduced speed. In the Committee's opinion, too much information is displayed on the signs. This may result in motorists reading signs instead of watching the road. Times when lower speed limits apply are inappropriate in many circumstances, particularly in the morning. A starting time of 7.00 am is far too early. The lack of traffic congestion and absence of students in any sort of numbers at this time in the morning only reinforces the motorists mis-perception that a lower speed limit around schools is not necessary. This may result in motorists not observing lower speed limits at the times they really should be driving more slowly. A finishing time of 9.00 am does not always account for traffic arriving at and leaving pre-schools. Mr Leoll Barron, Principal of Maryborough State High, supported these views when he expressed concern about the amount of detailed information displayed on Schoolsafe speed limit signs and the appropriateness of the times during which the lower speed operates (Evidence 30.7.92, p.71).
- 80 During a visit to Victoria in February, the Committee observed a system where crossing supervisors at schools changed the speed sign when they commenced duty. This was done by displaying a sign for a lower speed limit which is normally padlocked to, and concealed by, the normal speed limit sign. The sign showing the lower speed limit is unlocked, and displayed at the appropriate times. During these times the normal speed limit sign is covered by the lower speed limit sign. When warranted, flashing amber lights in advance of the school zone are also used to further alert motorists to the hazards which lay ahead.
- 81 Schools are not the only areas in which lower speed limits would enhance the safety of pedestrians and cyclists. Streets around sporting fields, retirement villages, shopping areas, hospitals and other areas where pedestrian and cyclist activity is high, would also benefit pedestrians and cyclists. Identification of those areas where pedestrians and cyclists congregate or routes upon which they commonly travel, and signing them for lower speeds, is essential in order to create a safer environment for these vulnerable road users.
- 82 These lower speed limits will only be as successful as much as they are observed by motorists. To this end, greater levels of enforcement by Police would be necessary. Alternatively, installation of physical devices which would slow motorists to the appropriate speed, would achieve a similar result. Throughout the public hearings several witnesses, including Police, commented on the usefulness of speed cameras to assist Police with this enforcement role. In evidence, (27.4.93, p.22), Chief Superintendent Alan Honor, expressed his total support for speed cameras. He sees them being of benefit in deterring motorists from speeding as well as being effective in working towards a goal of making speeding socially unacceptable in Queensland. He pointed to the use of random breath testing and lower Blood Alcohol Content limits as having a similar effect on drink-driving. Early statistics from Victoria indicate that speed cameras in that State have had a marked effect on the speeding behaviour of motorists. They have considerably lowered the actual speeds at which motorists travel so that these speeds more closely reflect the posted speed limit. However, posted speed limits **must be realistic** with regard to the overall road environment and traffic conditions.

Recommendation 6

The Committee recommends that the general urban street speed limit be reduced to 50 km/h. The speed limit of 40 km/h should continue to be used around schools and in residential areas where the lower speed limit is supported by the installation of physical engineering devices. The use of a 40 km/h speed limit should be extended and applied in areas where pedestrian numbers are high (e.g. shopping centres and sporting, recreational and entertainment venues; around hospitals); and in areas frequented by elderly pedestrians.

Ministerial responsibility:

- Minister for Transport

Recommendation 7

The Committee recommends that Queensland Transport review the Schoolsafe Program with regard to:

- *the variable size of the speed limit signs;*
- *the amount of information displayed on the signs;*
- *determining the optimum location of the speed limit signs so that motorists receive adequate notice;*
- *the suitability of the times during which lower speed limits apply;*
- *the use of lower speed limit signs which are only displayed during the period of operation of the lower speed (signs could be changed by School Crossing Supervisors);*
- *the use (where justified on the grounds of increased accident risk) of flashing lights to provide further warning to motorists that they should reduce their travelling speed and proceed with caution.*

The area affected by the lower speed limit, the location of the speed limit signs, and the times during which the lower speed limit operates should all be determined in consultation with the school, local authority and any other community stakeholders.

Ministerial responsibility:

- Minister for Transport

Recommendation 8

The Committee recommends that general speed limits in urban areas be rigidly enforced, and especially where motorists are given a clear indication that a reduction in speed is required (eg turning into a residential street or precinct).

Ministerial responsibility:

- Minister for Police

ENGINEERING

- 83 Throughout the inquiry, the Committee received many suggestions on engineering treatments which would enhance the safety of both pedestrians and cyclists. Overall, the Committee believes that pedestrian safety can be significantly improved with an increased use of proven, available engineering solutions.
- 84 The Brisbane City Council (BCC), both in its submission and in evidence, gave details of the unsafe nature of zebra crossings, particularly on multi-lane roads. It is currently undertaking a planned program of removal and replacement of zebra crossings which fall into this category. Accident statistics quoted by the Council clearly supports this action. Increased use of median refuges, particularly when combined with pedestrian-activated traffic signals, would make the crossing of multi-lane roads (or any other hazardous road) considerably safer.
- 85 Moses (1987) stated that the Main Roads Department in Western Australia *"actually pursued the controversial policy of removing zebra marked crossings from four-laned roads in the Perth metropolitan area and replacing them with concrete median islands"* (p.15). Some 25 sites were selected to evaluate the effectiveness of this policy with the following results (1987, p.15):
- *pedestrian accidents reduced to one-fifth of their original level;*
 - *rear-end accidents reduced to one-sixth of the original level.*
- 86 Moses concluded that substantial savings (both in cost and accidents) were obtained by not using zebra crossings on four-lane roads. He also concluded that concrete/painted medians enhance pedestrian safety, particularly in strip commercial developments.
- 87 Greater use of pedestrian-activated traffic signals would also provide more safe crossing points for pedestrians, particularly the very young, the disabled, and the elderly. These are the categories of pedestrians who find crossing multi-lane roads more hazardous than other groups. The signalised crossing points should be part of a co-ordinated system of traffic signals which creates platooning of traffic. Both the very young and the elderly suffer because of inferior cognitive abilities and slower walking speeds. Young children also have trouble actually seeing traffic due to their height and the presence of parked cars and roadside objects. The disabled, according to the BCC in its submission, *"often suffer from a perception difficulty in picking adequate gaps in moving traffic and also must rely, to a certain extent, on the goodwill of drivers ..."*
- 88 Crossing points, whether by signals or other means, should be well lit. This will enhance crossing safety for pedestrians through better visibility of the roads and kerbs (particularly for the visually impaired) and aid motorists through enhanced conspicuity of pedestrians. The buttons which activate the signals should also be at a height appropriate for cyclists to use.
- 89 Traffic signals must be more pedestrian friendly where vehicles are turning, either right or left. An advance "green man" should be more widely used so that pedestrians can begin to use the crossing before faced with turning vehicles which threaten a pedestrian's right to cross in safety. Used correctly, they would also minimise disruption to vehicles. Crossing times should be calculated on the walking speed of elderly pedestrians, where appropriate. This would result in longer pedestrian signal phases.

- 90 The Committee believes that widespread use of Pelican signals, particularly on roads where a significant pedestrian crossing demand exists, would enhance pedestrian safety. Pelican signals require the motorist to stop at the red light. Once the pedestrian begins crossing, the light flashes amber, allowing motorists, in lanes cleared by the pedestrian, to continue. Once the crossing is completed, the flashing amber lights would stop and free traffic flow would return. This will enhance pedestrian safety and also minimise disruption to traffic flow. Cyclists could also use these crossings as long as they adopted safe and responsible riding behaviour. Again, call buttons would need to be appropriately sited to allow easy use by cyclists.
- 91 A report titled "*Safety for Seniors - Final Report on Pedestrian Safety*", published by a Perth-based multi-disciplinary working group, found that pelican crossings may not be any safer than zebra crossings because of (p.22):
- *red (light) running by motorists;*
 - *lack of obedience to the display of the WALK/DONT WALK signal."*
- 92 Despite these problems, the West Australian report states that pelican crossings are " ... *commonly used in Western Australia ...* " (p.22). The working group in Western Australia suggested several initiatives to deal with these problems. These initiatives included the addition of a flashing amber sequence to the pedestrian phase, provision of increased skid resistance on the road surface near the crossing, and advanced flashing amber lights to warn motorists of an impending red signal phase (p.22).
- 93 Other studies show a similar result. Hunt (1990, p.24) reported that accident studies in the UK indicated that where used on similar site conditions, the accident rates for zebra crossings and pelican crossings are similar. This was despite a public perception that pelican crossings are safer. Struik et al (1988 p.41) also reported similar findings from studies examined by them during their project. Like the Western Australian working group, Williams (1978, in Struik et al p.41) found that additional treatments were necessary to aid accident reduction and prevent pedestrian non-compliance.
- 94 To encourage the use of safe crossing points for pedestrians, more widespread use should be made of guard rail to direct pedestrians to the safe crossing facilities. The guard rail would also have the effect of preventing crossings at unsafe points. This would be particularly effective at points where bikeways or shared footways cross the road. Cyclists, as well as pedestrians, would benefit from this, particularly if a crossing point was combined with conventional traffic signals or pelican signals. The use of pedestrian overbridges or underpasses, combined with guard rail, would also provide a safe crossing point for both pedestrians and cyclists. However, overbridges and underpasses are expensive and could only be justified in areas of high traffic volumes and high pedestrian activity. The use of guard rail would help ensure the overbridge is used by removing access to other more unsafe crossing points. Increased use of kerb extensions at nominated crossing points, will encourage people to use these points, particularly if they understand the safety benefits of using these facilities. To assist and encourage cyclists to cross at these points, greater use of holding rails is necessary. These would allow the cyclist to activate, and wait for the signals to change, whilst remaining on the bicycle.

- 95 One of the most frequently mentioned problems facing cyclists using public roads, is their inability to activate traffic signals because of their significantly lighter weight when compared to other vehicles. Perhaps this is one reason why so many cyclists ignore red lights and ride straight through them. Alternatively, perhaps their inability to activate the detector loops is just a convenient excuse for them to ignore the red light. Either way, it is a significant problem if cyclists are to be encouraged to use existing roadways instead of having separate facilities. It is the Committee's belief that a detector loop, situated at some safe point on the roadway, should be available for cyclists to use and so register their presence with traffic signals controls. As a suggestion, a bicycle stencil could be used to indicate the area of the road below which the cyclist loop is located. Bikewest, in its publication titled "*Guidelines for the Design of Bicycle Facilities*" (1992) detail how this can be done (p.30).
- 96 Roundabouts are one traffic engineering device upon which this Committee made a recommendation in Report No. 7 (April 1992). This inquiry has revealed that roundabouts can be particularly dangerous for pedestrians and cyclists. Treatment incorporating the use of guard rail and kerb ramps are detailed in the Manual of Uniform Traffic Control Devices (MUTCD). Widespread use of these treatments would significantly enhance pedestrian and cyclist safety at roundabouts. Installation of the treatments at time of roundabout installation is the most cost-efficient time and method of providing these treatments. Such treatments will provide safe passage through roundabouts for cyclists who choose not to ride on the road space provided for all vehicles.
- 97 The Committee heard conflicting evidence on how cyclists should ride through roundabouts. Some cyclists prefer to ride close to the inside of the roundabout; some prefer to ride close to the outside of the roundabout; and still others prefer to ride in the middle (as would a car) as a means of clearly stating their "territory". It appears to be a personal choice based on their own experience, confidence and riding skills. The Committee is not going to recommend where cyclists should or should not ride on roundabouts. Whilst accepted as a safe traffic control measure for motor vehicles, roundabouts can be hazardous for cyclists who should recognise the dangers and ride to avoid those dangers, not to confront them.
- 98 The Committee could devote much more of this section of the report to identifying hazardous locations, and their remedial engineering treatments, for both pedestrians and cyclists. However, this will not be done. Listed below are some of the more common hazards which were put to the Committee as those which cyclists in particular, find annoying and unsafe:
- unsealed or inappropriately sealed road shoulders
 - drainage grates which run parallel to the kerb
 - raised drainage and manhole covers
 - bitumen which does not meet flush with the concrete gutter
 - loose or poorly positioned raised reflective pavement markers
- 99 In its submission, Queensland Transport (1992, p.7-10) provides a good summary of engineering treatments which can be used in providing infrastructure for pedestrians and cyclists. Briefly, they are:

Cyclists - Engineering Treatments

- exclusive bicycle lanes
- wide kerbside lanes
- shared bicycle and car parking lanes
- sealed shoulders
- separation of bicycle movements from vehicle movements through traffic signal phasing for cyclists

- special bicycle lanes at signalised intersections
- special treatments at high speed left turn slip lanes
- treatment for cyclists at roundabouts
- treatments at the intersection of bicycle paths and roadways
- treatments for cyclist priority in Local Area Traffic management
- signs, pavement markings and other traffic control devices
- bicycle refuges
- geometric treatment of paths shared by pedestrians and cyclists
- provision of off-road facilities and grade separation facilities
- bicycle barriers to prevent uncontrolled crossings and to channel cyclist towards safer crossings

Pedestrian - Engineering Treatments

- pedestrian refuges on roadways
- bollards
- signalised pedestrian crossings on high-volume, multi-lane highways
- unsignalised pedestrian crossings (where traffic volumes allow them to be used)
- pedestrian pressure detectors at signalised crossings (further assessment is required)
- separation by provision of pedestrian subways and bridges
- Local Area Traffic Management Schemes for the reduction of traffic speeds
- provision of school zones
- pedestrian barriers to prevent uncontrolled crossings and to channel pedestrians towards safer crossings
- pedestrian crossing warning signs
- provision of kerb extensions on multi-lane roads
- pedestrian malls
- internal access to major demand generators
- set down areas at schools
- use of variable message signs to advise motorists of pedestrian activity

100 The final report of the "*Older Pedestrian Demonstration Project*" sponsored by the Federal Office of Road Safety (O'Neill, 1992) also lists a number of engineering treatments used by municipalities and cites who took part in the project.

101 With respect to sealed road shoulders, it is important to note a study by Ogden (1992) for the Monash University Accident Research Centre (MUARC) which considered the safety effect of using sealed shoulders on rural highways in Victoria. The report found shoulder sealing to be associated with a 43% reduction in casualty accidents at sites where it is used (p.27).

102 In the Committee's opinion, this is one treatment which would clearly benefit cyclists as well as other road users. In evidence (27.4.93, p.42), Mr Paul Shelton, Senior Engineer for Queensland Transport supported this:

Shoulders most definitely not only advantage cyclists but also advantage anyone who travels on the road. That has been well documented from research.

- 103 The Committee believes that both the common hazards and correct remedial engineering treatments are well known to engineers at both the local government and state government level. Design guidelines issued by the various road authorities provide most of the answers. Experience gained from using these treatments in various locations under different conditions is also a valuable and important resource. Similarly, policy statements (eg Bicycle Institute of Queensland) and numerous other studies exist which provide engineers with all the necessary information on what, and what not, to do. It appears to be simply a matter of more widespread implementation of these known and proven treatments.

Recommendation 9

The Committee recommends that road authorities prepare a plan which provides for more widespread implementation of known and proven engineering devices, which enhance pedestrian and cyclist safety. In particular, the Committee recommends that authorities give priority to:

- installing more signalised pedestrian crossing points on major and/or multi-lane roads as part of a co-ordinated system of traffic signals which creates platooning of traffic;*
- eliminating zebra crossings on multi-lane roads;*
- installing median refuges, particularly on multi-lane roads, which can be used by both pedestrians and cyclists;*
- greater use of barrier fencing and/or planter boxes to prevent pedestrian and cyclist crossings at uncontrolled areas and to channel pedestrians and cyclists towards safer crossing points;*
- greater attention given to the location of bus stops to ensure the safety of school children who are required to cross the road when catching or leaving a bus;*
- longer pedestrian crossing phases in areas where elderly and very young pedestrian numbers are high;*
- installing bicycle-activated detector loops in designated bicycle lanes at traffic signals;*
- eliminating drainage grates which run parallel to the kerb, raised manhole covers on the roadway, and gaps between the road pavement and concrete gutters;*
- providing road space for cyclists where they are to be integrated with other road traffic through the use of exclusive bicycle lanes, wide kerbside lanes or shared lanes;*
- sealing road shoulders to the same level and standard as the road;*
- appropriate treatments where bicycles rejoin the road from separated bikeways or shared footways;*

Ministerial responsibility:

- Minister for Transport*
- Minister for Housing, Local Government and Planning*

Recommendation 10

The Committee recommends that Pelican crossings be introduced.

Ministerial responsibility:
· Minister for Transport

ROAD HIERARCHIES AND PLANNING

- 104 Throughout evidence heard at public hearings, it became increasingly apparent that local authorities need to establish a road hierarchy. This road hierarchy would consider the function and purpose of the road and ensure that future developments complement these pre-defined functions and purposes of roads. Local authorities will need to consider demographical trends when developing their road hierarchy so that future development is suitably controlled in areas where people want to live, shop and recreate. A properly defined, well-planned road hierarchy will allow roads to be built to a standard which will recognise safety, access and throughput needs of existing and future populations.
- 105 The Committee heard evidence which showed that some local authorities are in fact developing road hierarchies. The hierarchies recognise development needs and opportunities and provide for safe and efficient passage of traffic through developing areas. However, evidence was also heard of court decisions which support applications by developers wishing to develop land contrary to Local Authority plans. When this is allowed to happen, the local authorities road hierarchy is in danger of collapsing and may require considerable expense to rectify problems caused by developments, which conflict with an established road hierarchy.
- 106 The planning process for a road hierarchy must consider the views and needs of all stakeholders in the local authority. Widespread, effective and on-going consultation must occur with retailers, residents, commercial business, schools, and if necessary, other levels of government, to ensure all needs are incorporated into the final road hierarchy plan. Different groups of road users should also be consulted, particularly pedestrians and cyclists, so that their needs are accommodated. Specific safety treatments and designs around high risk areas such as, for example, shopping centres, schools, universities, retirement villages, hospitals, community centres and child care centres could be incorporated into plans and discussed with those affected. These treatments and designs, whilst aimed at enhancing the safety of pedestrians and cyclists, would benefit all road users. This will help ensure community acceptance and encourage community ownership of the resultant infrastructure. The submission from Queensland Transport called for "*the finalisation of road network-wide introduction of road hierarchy*" (1992, p.11). The submission states:
- "The provision of a clear hierarchy of roads within a road network is considered by the authoritative report of the European High Level Expert Group for a European Policy for Road Safety (1990) to be the most important of a number of provisions to guide road improvements. Such a road hierarchy of freeways, arterials, collectors and local roads exist in Queensland. However there are significant gaps in its implementation. A network-wide hierarchy audit and the development of a prioritised program for the finalisation of the implementation of road hierarchy principles is required. Once a hierarchy is established, there will be clear standards for the provision of facilities for unprotected road users based on type of road."*
- 107 Importantly, increased use of public transport will be facilitated through effective forward planning and road hierarchy development. New developments which increase demand for public transport; such as shopping centres, schools, residential estates; can be sited so as to maximise use of current and future public transport services. Given the impressive safety record of public transport, road safety will be significantly improved.

108 It is imperative that the design and construction of new roads clearly reflect the needs of ALL road users, not just motor vehicles. Unprotected road users (pedestrians and cyclists) will reap the benefits of effective road hierarchy and infrastructure planning. Roads being upgraded should also incorporate the safety needs of pedestrians and cyclists. The common factor in both new road construction and upgrading of roads is that the incorporation of appropriate pedestrian and cyclist safety facilities will NEVER be cheaper than at that point in time. Road authorities should conduct thorough evaluations of the planning process and the siting, design and effectiveness of pedestrian and cyclist safety facilities in order to constantly seek ways of maximising benefits from the installation of these facilities. Smith (1992, p.10) spoke of the importance of recognising opportunities for incorporation of the needs of all modes of transport, but particularly pedestrians:

"The challenge is to make land development and transportation systems more sensitive to pedestrian needs. This involves not only building sidewalks but determining how land uses can be arranged to facilitate and promote the walking trip. It means thinking about the small things that make a place conducive to walking. It means taking a pragmatic approach to the role of walking in daily life, recognising that the automobile, or some form of personal vehicle, is with us to stay. Opportunities for pedestrian, bicycle, and transit linkages should not be forgotten. Pedestrian needs can often be treated quickly and simply, sometimes at little or no cost. Site planning is one of the major planning and design activities that shape suburban communities. The pedestrian should be an integral design factor in site planning, from the initial concept through the final drawings. This is the definition of "pedestrian-sensitive" site planning — treating the pedestrian not as an afterthought but as a natural part of the whole site-planning process."

109 This philosophy is no less important for cyclists.

110 In its submission, Queensland Transport (1992, p.11) stated:

"There are a number of published standards for incorporating road safety into land and road network development. Despite this, current use is not widespread. Savings to the community in accident costs and to local authorities in remedial treatments would underwrite any additional costs incurred through modified project design."

111 Questions to road authorities at public hearings about whether the needs of pedestrians and cyclists are planned for when new or upgraded infrastructure is provided, were generally answered in the affirmative. That is, authorities say they do plan for the safety of pedestrians and cyclists. However, the Committee wonders at the priority given to planning for pedestrians and cyclists and believes that these groups must be given a higher priority.

112 A wonderful opportunity currently exists in Queensland for these planning principles to be put in place, with the construction of the rail link to the Gold Coast. The various authorities, with effective forward planning, could provide bicycle pathway facilities within the corridor required for the rail link. This could either be beside the rail line or beside the service road which will be required. At a public hearing on 27 April 1993, Queensland Transport witnesses were asked whether a bikeway will be built parallel to the Gold Coast - Brisbane rail link. Mr John Hengelmolen, Senior Policy Adviser, Policy and Planning Unit advised Queensland Transport have been negotiating with Queensland Rail about the possibility of providing for a bikeway within the Gold Coast rail corridor (Evidence, p.38). This is but one example of how effective planning, consultation and negotiation can work towards a solution which provides multi-use transport facilities within the one development.

- 113 In the Committee's view, there is no doubt that the development of a road hierarchy and effective forward planning are integral to the future provision of a safe environment for pedestrians and cyclists. Furthermore, other road users, and indeed the entire community, benefit from such action.

Recommendation 11

The Committee recommends that local authorities prepare a strategic plan for the establishment of a road hierarchy and adhere to it. The strategic plan should be approved by the Department of Housing, Local Government and Planning and be used by local authorities as the basis of approval for future development. The road hierarchy should incorporate the safety needs of pedestrians and cyclists so that these needs are not forgotten in new subdivisions. The road hierarchy should also facilitate the implementation of effective public transport systems as one means of improving road safety.

Ministerial responsibility:

- Minister for Housing, Local Government and Planning

Recommendation 12

The Committee recommends that authorities place a significantly higher priority on providing infrastructure which addresses the safety needs of pedestrians and cyclists, when establishing transport corridors, upgrading or modifying existing roads, and implementing local area traffic management schemes on existing road networks. Safety audits must be rigorously carried out at the early planning and design stages to ensure pedestrian and cyclist safety needs have not been forgotten.

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning

FOOTPATH CYCLING

- 114 From 1 January 1993, cyclists in Queensland have been permitted to ride on footpaths. In some quarters, this has caused considerable safety problems for very young and elderly pedestrians. Anecdotal evidence suggests the cyclist typically responsible for the most number of complaints and/or incidents is the teenage male. Adult cyclists appear to either use the road or have a far more responsible and considerate attitude when riding on footpaths.
- 115 The advent of legal footpath cycling is born out of a concern to make cycling safer for those groups of cyclists who are at most danger when riding on public roads. That is, the very young (up to about 10 or 12 years of age) and the elderly. Like pedestrians in these age groups, their cognitive abilities are inferior. Their bicycle control skills are also generally of an inferior standard. Many footpaths in all areas of Queensland are under-utilised and their use by cyclists, for the most part, is an efficient use of resources.
- 116 The bigger argument from which this partial solution emanates is whether to segregate cyclists from road traffic OR to integrate cyclists with road traffic. The consequences of a cyclist/vehicle conflict are far more severe than the likely consequences of a bicycle/pedestrian conflict. In cyclist/vehicle conflicts, the cyclist usually dies or is seriously injured. In cyclist/pedestrian conflicts, the pedestrian is usually the one injured with severity of injury generally dependant on the age of the pedestrian. The safety benefits of footpath cycling, at least for cyclists, are clear. Despite this, the Committee recognises that very young and elderly pedestrians are at greater risk of serious injury in areas where they previously felt safe.
- 117 Queensland have opted to reduce the danger to cyclists by allowing footpath cycling. This is similar to the approach being considered by Victoria. However, unlike Victoria, Queensland authorities have not conducted any trials nor have they widely publicised or promoted footpath cycling. Victoria have had mixed results in footpath cycling trials. Trials in two (2) municipalities have been continuing over a 4 year period with another municipality cancelling trials after a 6 month period. This was in response to lobby groups for elderly citizens successfully arguing the increased dangers faced by elderly pedestrians.
- 118 The second and final report of the inquiry by the Victorian Parliament's Social Development Committee into "*Child Pedestrian and Bicycle Safety*" had recommended urgent research into footpath cycling (1987, p.200).
- 119 However, the footpath cycling trials in Victoria were given impetus by the release of the Victorian Bicycle Strategy in 1990 (Klein 1992). The trials were considered worthwhile "*since it was recognised that* (Klein 1992):
- *A significant level of footpath cycling already existed in the community;*
 - *Teachers of traffic safety education programs could not effectively address the issue of footpath cycling;*
 - *A Law Compliance Seminar attended by Senior Police recommended priority action to rationalise and regulate footpath cycling;*
 - *The 1991 Monash University Accident Research Centre report, "**Indicative Benefit/Cost Analysis of Road Trauma Countermeasures**" indicated a 43:1 benefit to cost ratio;*

- *The 1988 Monash University Accident Research Centre report, "The Risks of Bicyclist Accident Involvement" concluded that cycling on the footpath was significantly safer than cycling on arterial roads."*

- 120 In a study to examine the incidence of pedestrian casualties following collisions with cyclists on the footpath undertaken by Monash University Accident Research Centre (MUARC) in 1989, Drummond examined the hospital records on admissions and casualties for people treated in the emergency departments at seven major Melbourne hospitals and the Geelong hospital. The results of the study "*showed that this particular problem was of very small proportions*" (Drummond 1989, p.6). The study did not cover less severe injuries and pedestrian amenity. Queensland Transport statistics also indicate that this is not a significant problem.
- 121 Trials over 4 years (as conducted in Victoria) may seem too long a time over which to consider legalising a practice which is already widespread. However, the big advantages of a lengthy trial and evaluation of footpath cycling is the opportunity to involve the community. Widespread and regular community consultation has been a feature of the Victorian example. This has generated many ideas on all aspects of the ramifications for pedestrians, cyclists and authorities in allowing cyclists to use footpaths. In consultation with the appropriate authorities, the community is determining the parameters of the issue; the community is developing solutions for any problems; and the community is assisting in implementation. In the end, the community will own the issue and, it is hoped, play a large role in enforcing regulations governing footpath use by cyclists.
- 122 From the Committees understanding of the introduction of the legal footpath cycling in Queensland, the community consultation was non-existent. In retrospect, the use of community consultation would have been beneficial.
- 123 Several Committee members have received numerous complaints from constituents about the dangers they now face, as pedestrians, when using footpaths. Reports of accidents, often involving a teenage male cyclist, have been frequent. The lack of adequate publicity, promotion and community consultation and involvement about the decision to allow footpath cycling has, in the Committee's views contributed significantly to the safety problem, either real or perceived. Such publicity and promotion could have addressed why footpath cycling was introduced; the need for the community to be cognisant of the change; and the rights and responsibilities of both pedestrians and cyclist when they jointly use footpaths.
- 124 Whilst many existing footpaths are severely under utilised, many footpaths experiencing heavy pedestrian traffic are not wide enough to allow a safe mix of pedestrians and cyclists. Wider paving of footpaths, with appropriate markings to delineate "territory", should be provided in these instances. More widespread use of existing signs is also required.
- 125 Clear signs in prominent, appropriate locations will assist all who use a footpath. These signs should be supported by stencils, placed at regular intervals on the footpath itself, to reinforce the message conveyed by the sign.
- 126 The Committee heard considerable evidence which called for the banning of cyclists from ALL footpaths. Other evidence suggested age-based bans and yet other evidence proposed banning cyclists from Central Business District (CBD) areas. Evidence heard, placed skateboarders and rollerbladers in the same category as cyclists as far as being a danger to pedestrians was concerned. The Committee noted media reports which detailed calls by Police to ban rollerbladers from CBD areas in Brisbane. The Committee also noted that bans on rollerbladers and skateboarders in CBD areas already exist in Melbourne.

- 127 In the Committees view, age-based bans, either for footpath or on-road cycling, would be unenforceable. In the words of the Police witness in Rockhampton, Sgt Walker, (Evidence 29.4.93, p.23):

"I feel it would be an enforcement nightmare."

This is but one example of a commonly held belief. Similarly, the Committee accepts the safety benefits of footpath cycling despite the increased danger to pedestrians.

- 128 In summary, the Committee acknowledges that limited resources will restrict the provision of specialised off-road facilities for cyclists to those areas of most need. Consequently, the Committee supports integrating cyclists into the traffic, WHERE IT IS SAFE TO DO SO. On-road engineering treatments, such as sealed shoulders and wide kerbside lanes which make the road a safer place for cyclists to travel, should be widely available. Where traffic volumes, lack of road space, or other unsafe circumstances exist, cyclists should be integrated with pedestrians OFF-ROAD either on footpaths or on separate cyclist facilities. However, the Committee supports banning cyclists, skateboarders and rollerbladers of all ages, from CBD areas and all other areas where they represent a significant threat to all pedestrians, but most importantly to those groups of pedestrians most at risk; the very young and the elderly.

Recommendation 13

The Committee recommends that all cyclists, skateboarders and rollerbladers be banned from riding on:-

- *footpaths in Central Business District (CBD) areas;*
- *footpaths in Shopping Centres;*
- *footpaths in Strip Shopping areas;*
- *footpaths in Shopping Malls;*
- *footpaths in the vicinity of retirement villages or areas where elderly people widely use footpaths;*
- *footpaths where the presence of cyclists, skateboarders and rollerbladers on footpaths represent a significant danger to pedestrians, or where pedestrian numbers on footpaths are high.*

The Committee further recommends that Local Authorities be empowered to determine the areas where a ban on cyclists, skateboarders and rollerbladers exists and to sign those areas accordingly.

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning
- Minister for Police

Recommendation 14

The Committee recommends that in the construction of new footpaths and dual-use pathways, consideration be given to providing sufficient pavement width for the safe travel of pedestrians and cyclists. These facilities should be clearly signed, and delineated where appropriate.

Ministerial responsibility:

- Minister for Housing, Local Government and Planning

PROMOTION/PUBLICITY

- 129 The Travelsafe Committee (Report No.5) has previously called upon parents to recognise and accept their responsibility for the safety of their children when riding bicycles on the road. The report was published as a result of incidental evidence heard at public hearings on other road safety matters. So consistent was the message about poor skills and behaviour of child cyclists, that the Committee felt compelled to issue that short report.
- 130 Almost two (2) years on, nothing much has changed. Consistently, evidence heard by the Committee called for parents to accept greater responsibility for the behaviour of their children on public roads. Parents should not need reminding that child cyclists, when hit by a motor vehicle, rarely get a second chance. Certainly, Mr Barry Collis, Road Safety Co-ordinator in the Department of Education, is a strong and vocal advocate of parents setting a good example for their children.
- 131 Children learn new behaviours in many ways. For example, they can be taught how to behave; they can be coerced or persuaded; OR they can model their behaviour on someone who is important in their lives. This "someone" is usually one or both parents. Importantly, a child's attitude may also be modelled on one or both parents with resultant behaviour a reflection of parental attitude and behaviour. Examples of observed unsafe behaviours by parents around schools include:
- parking in NO STANDING zones;
 - double parking;
 - parking on the opposite side of the street, forcing children to cross the street to get to or from school; and
 - letting children in and out of the car on the open side of the car.
- Parents who practise these, and other unsafe road behaviours, merely reinforce in the child that this behaviour is acceptable and normal. The involvement of parents in curriculum or school-based education may be one way of increasing parent's awareness of their responsibilities.
- 132 Road safety is one area where parents have a great responsibility to ensure their children adopt safe behaviours and a responsible attitude. Practising simple behaviours, such as getting in and out of the family car on the kerb-side of the vehicle, can be effective in building up a road safety awareness in children. Whilst curriculum-based road safety education is considered by the Committee to be all important, it needs reinforcement and learning outside of school hours, in the same way as other subjects learned at school.
- 133 Most road safety experts agree that children under the age of 10 or 12 do not have the necessary cognitive and physical skills to ride a bicycle safely on a public road. However, as stated earlier, age-based bans would not be enforceable. They would also create hardship for many families in provincial and rural areas. Parents can undoubtedly play a far greater role in ensuring young children in particular, are not exposed to the dangers of traffic. Child pedestrians also have problems judging speeds and distances; they have difficulty seeing (line of vision) and being seen; and they do not appreciate the dangerous nature of the road environment.

- 134 Innovative promotional campaigns which directly address specific road safety issues concerning children, must be developed. They must be targeted at the audience whose behaviour you wish to change; and the target audience must see the desirability or benefits of changing their behaviour. In the case of parental responsibility for their children's behaviour as cyclists, both parents and children must be targeted. Campaigns which target child cyclists for specific issues (eg "Heroes Wear Helmets" advertisements by Queensland Transport) have been previously conducted. Given the right ingredients and available funding, there is no reason why a similar campaign cannot be developed to remind parents of their immense responsibility.

Recommendation 15

The Committee recommends that Queensland Transport develop an enterprising, innovative and intensive promotional campaign aimed at parents, to remind them of their parental responsibility for the safety of their children as both pedestrians and cyclists. The campaign should include warnings to parents of the dangers of allowing young children under 10 to ride on public roads and should encourage parents NOT to allow this practice without prior or on-going adult supervision.

Ministerial responsibility:

- Minister for Transport

ENFORCEMENT OF TRAFFIC LAWS ON CYCLISTS

- 135 During the early months of this inquiry in 1992, it was evident to the Committee that the law making bicycle helmet wearing compulsory needed an enforceable penalty to make it successful. Combined with this, considerable evidence was also heard calling for the development of realistic penalties for a range of bicycle offences. It is pleasing that both matters have been addressed. In the Committee's opinion, the attention to these matters has largely resolved the important enforcement issues for cyclists.
- 136 Certainly, the early evidence from Victoria shows that the introduction of the mandatory bicycle helmet wearing laws in that State in 1990, *"has been accompanied by an immediate large reduction in the number of bicyclists with head injuries"* (Cameron et al 1992, p.16). The authors go on to say *"apparently this has been achieved both through a reduction in the number of cyclists involved in crashes (at least partly through a decrease in bicycle use) and a reduction in the risk of head injury of cyclists involved in crashes"* (p.16). This study helps to confirm what road safety practitioners, have long held to be true; bicycle helmets do save lives; they do prevent serious injury; they make cycling safer.
- 137 However, the Committee received evidence from several witnesses that cyclists are still not complying with the helmet law. Many examples were cited, in all public hearings, of cyclists:
- carrying their helmet on the handlebars;
 - not fastening the straps correctly;
 - not wearing the helmet correctly; and
 - not wearing a helmet at all.
- 138 This trend is disturbing and authorities need to develop an appropriate mix of enforcement, education and publicity to address this matter. In evidence, (27.4.93, p.3) Mr Barry Collis told the Committee about his on-going promotion of the benefits of wearing a bicycle helmet through the formation of an Elite Helmet Club:
- "We have what we call the elite Helmet Club. If we are aware that a student has been involved in an accident and the helmet has saved them from serious head injury, we replace their helmet immediately, free of charge, courtesy of the Queensland Teachers Credit Union, and we retrieve the old helmet that looks like the one in the photo, and we use it in awareness talks They cannot argue with that because the helmets have been there, done that, and they have saved one of the kids' peers We present them with an Elite Helmet club certificate. It is framed and we generally get it presented by a high profile person."*
- 139 The introduction of a law compelling cyclists to wear a helmet, combined with a penalty for non-compliance, has led to an increase in bicycle helmet wearing rates. However, such legislation does not mean that authorities can relax their promotional and educative efforts. Widespread, on-going promotion and education programs must continue if helmet wearing rates are to be maintained and increased.

- 140 The Committee noted a media article (Chappell, 3.3.93, p. 6) reporting over 3000 infringement notices for breaches of new bicycle laws being issued in January 1993 alone. The disturbing aspect of these 3000 notices was that over 1900 of them were for adults; the very group which should be providing a good example for younger children. The Committee understands that over 3200 bicycle offence notices (child cyclists) and over 5000 traffic offence notices (adult cyclists) were issued for the period 1 January to 31 March 1993.
- 141 It is apparent that significant numbers of cyclists continue to disregard traffic laws and their own safety. For this reason, current levels of enforcement should be maintained and also targeted at those groups of cyclists with lower helmet wearing rates.
- 142 Evidence was heard of the ability and willingness of schools to assist in the enforcement of bicycle helmet wearing. Private schools which enforce helmet wearing usually have higher rates of compliance than government schools. No doubt, this is due, at least in part, to the greater power over student behaviour able to be exercised by private schools. However, some school principals expressed the belief that the role of schools and teachers is to educate, not enforce traffic laws. The Committee is sympathetic to this view; however, assistance by school administrations in enforcing this law would greatly increase helmet wearing rates.
- 143 At present, the Traffic Act states that cyclists must wear helmets on roads and bicycle paths. Advice received by the Committee states that this is interpreted to mean all public places. In the Committee's view, this is a liberal interpretation. Further amendments to the Traffic Act are required to ensure that cyclists must wear helmets when cycling in all public places. In the Committee's view, police should also have a discretionary power to impound bicycles as punishment for a cyclist committing a breach of the law. In some cases, such a denial of privilege may have greater impact.
- 144 Another section of the Traffic Act requiring review is Section 16. This section provides for Police to perform Random Breath Testing (RBT) on the controllers of a motor vehicle, tram, train or vessel. Under the Traffic Act, a bicycle is considered a vehicle, not a motor vehicle. Cyclists are therefore not subject to the RBT procedures set out in Section 16 of the Traffic Act. The Committee was advised, that because of this, it was far more difficult for Police to test cyclists for alcohol levels. An appropriate amendment to Section 16 of the Traffic Act would provide for cyclists to be subject to the same RBT procedures as motorists. It may encourage Police to test greater numbers of cyclists.

Recommendation 16

The Committee recommends that the Traffic Act and, where applicable, local authority by-laws, be amended to clearly state that bicycle helmets must be worn when cycling in all places other than private property. This would mean all public places and include, for example, public parks, bicycle paths through parks and recreation areas, shopping centre car parks and separate bicycle paths.

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning

Recommendation 17

The Committee recommends that current levels of enforcement for all bicycle offences be maintained. In particular, those groups of cyclists with lower helmet wearing rates, should be targeted.

Ministerial responsibility:

- Minister for Police

Recommendation 18

The Committee recommends that the Traffic Act be amended to provide for cyclists being subject to the same random breath testing (RBT) procedures as motorists.

Ministerial responsibility:

- Minister for Transport

Recommendation 19

The Committee recommends that the legal and operational considerations of giving Police the power to impound a bicycle if the cyclist is riding in an unlawful manner, be investigated.

Ministerial responsibility:

- Minister for Transport

SAFETY FEATURES OF BICYCLES

- 145 The modern bicycle is usually sold with a minimum of safety accessories. Reflectors are commonly incorporated in the pedal assembly and also attached to the spokes of each wheel. Most bicycles are also sold with a system of hand operated brakes. Significantly, front and rear lights are missing from most new and used bicycles sold at retail outlets.
- 146 The Australian Road Research Board (ARRB), on behalf of the State Bicycle Committee of Victoria, recently reported on the merits of various conspicuity aids for night-time cycling. The report concluded that "*bicycle accidents at night are a relatively small part of the problem, but there is a very big problem with accidents at dawn or dusk*" (Cairney, 1992, p.33). It considered various accessories; reflectors or lighting systems; which would aid conspicuity of cyclists. Importantly the flashing tail lights which can be attached to the bicycle or the rider, clearly performed better than non-flashing lights, particularly against a cluttered background (p.33). Whilst adequate lighting systems, particularly effective ones like flashing lights, remain optional extras, the Committee believes most cyclists will opt not to use them, even as an aid to conspicuity, unless they are made compulsory.
- 147 Mr Michael Bryan, Chairman of the Cairns/Mulgrave Bicycle Safety Advisory Committee, recommended wider use of flashing tail lights. Mr Bryan also hinted at government intervention to reduce the price of these lights so that they are widely available and affordable for all cyclists. The Committee believes that only competitive or commuter cyclists would use these types of lights, whilst they remain at current prices. Similarly, widespread use by pedestrians would be unlikely unless prices fell dramatically. It is important that only lights which meet a required minimum standard be sold and that this minimum quality not be compromised in the interest of wider use. Whilst Mr Bryan's suggestion is noted, this Committee does not believe it is appropriate for it to be recommending any government intervention to reduce the market price of these lights. However, the Committee does consider that community organisations should be encouraged to use bulk purchase schemes to reduce the price of this product which will encourage cyclists to purchase and use them as an aid to conspicuity. A better option for pedestrians may be the use of reflective elastic bands which were brought to the Committee's attention in a submission from Mr Teuvo Siltala of the Front Line Centre.
- 148 However, impediments to the wider use of flashing tail lights do exist. The ARRB report (1992, p.33) stated:
- "There appears to be a need to revise the Australian Standards on bicycle lighting to take account of flashing lights, and possibly a need to consider raising the Australian Standard on reflectors to take account of microprismatic sheeting;*
- Any legal impediment to the use of flashing tail-lights of adequate quality should be removed. Ideally, this should be preceded by amendments to the relevant Australian Standard, and only those lights meeting the standard permitted."*
- 149 The Committee supports the ARRB conclusion that the Australian Standards should be revised so as to account for the use of flashing tail lights.

- 150 Furthermore, Section 95 of the Traffic Regulation 1962 requires a bicycle tail light to be a clear red light affixed to the bicycle in certain positions. This section of the regulation should be amended to permit the use of flashing tail lights.
- 151 With the advent of the legal footpath cycling, the Committee also believes that it is time for cyclists to return to using a bell to warn other users of the footpath of their presence.
- 152 Section 68 (1) of the Traffic Regulation 1962 requires that a person shall not drive a vehicle upon a road unless it is equipped with certain items of safety equipment. These items are specified elsewhere in the regulation. The provisions relating to bicycles refer to lighting, brakes, a warning device, and the colour of the rear mudguard. The penalty for not complying with these provisions is \$2. In the Committee's opinion, these provisions should be reviewed to reflect modern bicycle design. The penalty should also be revised to reflect the serious consequences of not complying with the provisions. The offence should be included in the Offence Notice System for cyclists.
- 153 The Committee has formed the view that unless these and other safety accessories are on bicycles at the point of sale, they will, in most part, NOT be fitted by the owner of the bicycle. For teenagers, peer pressure no doubt contributes to this as does the varying design of bicycles which teenagers ride. However, the Committee believes that point of sale is the best link in the chain at which to require minimum, adequate safety accessories to be fitted to bicycles.

Recommendation 20

The Committee recommends that all new and used bicycles available for sale at retail outlets be equipped with a bell, headlight, tail light, reflectors and independent brake as standard minimum safety requirements.

Ministerial responsibility:

- Minister for Consumer Affairs

Recommendation 21

The Committee recommends that the Australian Standards be revised so as to account for the use of flashing tail lights.

Ministerial responsibility:

- Minister for Transport

Recommendation 22

The Committee recommends that any legal impediment to the use of flashing tail lights of sufficient quality, be removed.

Ministerial responsibility:

- Minister for Transport

Recommendation 23

The Committee recommends that provisions in the Traffic Regulation 1962 which require bicycles to have certain items of safety equipment be reviewed. The Police should be given power to impound a bicycle which does not comply with these provisions. The penalty for not complying with these provisions should be revised. The offence for non-compliance should be included in the Offence Notice System for cyclists.

Ministerial responsibility:

- Minister for Transport
- Minister for Police

Recommendation 24

The Committee recommends that community organisations be encouraged to use bulk purchase schemes to reduce the price of flashing tail lights used by cyclists. This will encourage cyclists to purchase them as an aid to conspicuity.

Ministerial responsibility:

- Minister for Consumer Affairs

INFRASTRUCTURE/FACILITIES FOR CYCLISTS

- 154 Like any other road user, cyclists have infrastructure needs which make cycling safer, more comfortable and less stressful. There are undoubtedly environmental benefits associated with encouraging people to use the family car less, and to use a bicycle more. Personal health benefits also accrue to the regular cyclist. However, it is the Committee's belief that significantly more infrastructure is required before the wider community comes to accept that cycling is a safe and convenient alternative means of transport. Many infrastructure needs of cyclists have already been addressed in the section on Engineering.
- 155 The Safe Bikeways Program, announced by the Premier in August 1992 and being administered and progressively implemented by Queensland Transport, is addressing part of the infrastructure needs of cyclists. This program is seeking to provide safe, convenient bicycle facilities which will link residential and commercial areas. Schools are part of these links where appropriate. For example, a major component of the program is a network of bikeways linking Griffith University to Southbank. The program is also providing bikeways in many local authorities throughout Queensland. This program, and others like it, will require on-going financial commitment. Some provincial cities of Queensland have already addressed the lack of infrastructure and are working towards providing more and better facilities over a period of time.
- 156 It is important that authorities responsible for the provision of infrastructure for cyclists, do so in a structured, systematic manner. When doing this, it is important to remember that cyclists, like motorists, wish to travel by the shortest, quickest route. One of the reasons for some of the deviant behaviours of cyclists is that the current road network is not able to safely meet this need. Cyclists take risks in order to overcome these infrastructure shortcomings. Bikeway connections to major attractions such as schools, universities, shops, main business areas, and recreational facilities can be identified and implemented progressively. The bicycle routes can be a comprehensive network of on-road (eg wide kerbside lanes) and off-road facilities which will encourage use by cyclists and provide maximum safety in heavily trafficked areas. Secure, protected storage facilities, for bicycles and helmets, are required at each of these major attractions so that cyclists can safely store their bicycle and helmet while they conduct their business. Evidence was heard from Mr Barry Collis that some schools in various parts of Queensland are addressing storage needs for students, cycles and helmets.
- 157 Throughout this investigation, it became increasingly obvious to the committee that authorities:
- have sufficient knowledge of the infrastructure needs of cyclists; and
 - have comprehensive design guidelines for the construction of the infrastructure (eg MUTCD, Guide for the Provision of Bicycle Facilities.)
- 158 The authorities, local or state government, simply need to provide more of the infrastructure which they know will enhance the safety of cyclists. The Committee reiterates its belief that substantially more infrastructure is required before the community should be openly and vigorously encouraged to undertake more cycling trips.
- 159 Commuter cyclists are often disadvantaged or discouraged because of a lack of shower and changing facilities in the workplace. The National Bicycle Strategy (p.7) cites the provision of these types of facilities by employers as one contribution which effective urban planning can make to a wider adoption of bicycles as means of alternate travel. The Policy Statement (p.11) of the Bicycle Institute of Queensland (BIQ) submitted with the BIQ's submission to the Committee states:

"The BIQ advocates improved end-of trip facilities for cyclists, in particular:

- *Adequate bicycle parking at all trip attractors,*
- *Employee, student and public showers and bicycle storage facilities in all major establishments,*
- *Bicycle lockers at railway stations and other principal public transport interchanges."*

160 Given Queensland's ideal climate, but high temperatures and usually high humidity, cyclists must be able to shower and change at the end of a commuter trip to work. With an increasing societal emphasis on personal health and fitness, many people are exercising before work or during lunch hours. A greater number of shower and change room facilities will address both needs. Secure bicycle parking and storage facilities at shopping centres, public transport interchanges and other public places are also required by cyclists. It is important that these facilities are conveniently located, well lit and designed so as to protect bicycles from damage. In evidence (29.4.93, p.30) Mr Chris Head of the Rockhampton Bicycle Planning Group stated:

"There should be a standard design for bicycle parking called medium security parking. In that instance, you could lock your bike and be away for up to three hours or even a whole day and the bike would be intact when you got back. It is not an enclosed locking space. At present, the general Australian standard is a U-shaped piece of metal against which people lock their bikes. Generally speaking, there needs to be much more adequate bicycle parking close to the entrances of shopping centres and all general facilities. Those facilities need to be of an adequate standard so that bikes do not get scratched. People should not have to lean their bikes against other bikes. The facilities must be visible and located where people will use them."

161 It is imperative that all infrastructure and/or facilities provided to address the needs of cyclists, be designed, sited and implemented with the cyclist's needs foremost. Cyclists, either individually, or through peak organisations or lobby groups, must be consulted. Failure to do this, may result in expensive facilities NOT being used, a reluctance by authorities to commit additional funds, and an insignificant increase in cycle usage.

Recommendation 25

The Committee recommends that significantly more on-road and off-road infrastructure, which will make cycling safer and more appealing, be provided. This must be done before cycling can be actively and effectively encouraged as an alternative means of transport. The main infrastructure needs are:

- safe, practical and convenient routes to inner city areas using an appropriate mix of known safe on-road and off-road facilities;*
- end-of-trip facilities at places of employment such as secure parking and storage facilities, showers and change rooms;*
- secure, convenient parking and storage facilities for bicycles at schools, shopping centres, public transport interchanges, and other public places:*
- networks of bicycle paths which connect major local attractions and facilities such as, for example, Schools, TAFE colleges, Universities, Recreation Areas, Shopping Centres, Community Centres, and Sporting Venues; and*
- improving the riding surface of roads so that on-road cycling is safer.*

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning
- Minister for Employment, Training and Industrial Relations
- Minister for Business, Industry and Regional Development

PREVENTION PROGRAMS

162 During the course of this inquiry, the Committee visited Victoria to inspect several road safety programs being implemented by VICROADS. The programs inspected were:

- Safe Routes to School;
- Walk with Care;
- Responsible Serving of Alcohol.

163 "Safe Routes to School" addresses the young pedestrian accident problem (young cyclists may also benefit). "Walk with Care" addresses the elderly pedestrian accident problem. "Responsible Serving of Alcohol" addresses the middle-aged drunk male pedestrian accident problem. As can be seen, each program addresses a "high-risk" pedestrian accident category. VICROADS are the driving force behind the development and implementation of the programs. Each program emphasises active community involvement. This engenders community ownership of the program, its development and the solutions. It also creates an awareness in the community of the extent and severity of the road safety problem.

164 To the best of the Committee's knowledge, no similar programs exist in Queensland. Queensland Transport have developed programs which focus on school-based road safety education. A Queensland Transport officer at a public hearing on 27 april 1993 commented on how the Schoolsafe Program facilitates community involvement (p.43):

"Under the department's School Safe Program, an active effort is made to include p. and c.'s and p. and f.'s in that process. In fact, those community groups are very actively involved in making decisions with the principal about the school environment and recommending changes to the school environment on the basis of where they see the potential accident problems."

165 Another officer commented on some of the difficulties involved in using this approach (p.43):

"As to the involvement of community groups — the way things are organised in Victoria is different to here. In Victoria, I believe that large sums of money are available which can be given to community groups to enable them to establish very strong community-based organisations. At this stage, we are approaching things somewhat differently. We like to encourage p. and c.'s to get involved, but of course p. and c.'s vary quite dramatically in how strong they are and how willing they are to take on such roles. When p. and c.'s or school crossing supervisors perceive particular problems around the school, they draw that to the attention of the police and/or the local authority, and attempts are made to remedy that."

166 The Committee sees two (2) important issues. Firstly, programs which pro-actively and widely involve the community in road safety decision-making, require adequate resources to ensure their success. Secondly, the community will only be enthusiastically involved if it sees its initiatives actually implemented. The Committee recognised both these factors during its visit to Victoria.

- 167 However, it must be noted that many of the solutions implemented as a result of the Victorian programs, are low-cost. Whilst funding is required to establish and implement the programs, many of the solutions are not expensive. For example, one site in Melbourne (Hotham Street, East St Kilda) inspected by the Committee had seen eleven (11) mid-block pedestrian accidents over a three (3) year period from 1988-1990. Progressive installation from 1991-1993 of low-cost painted medians and strategically placed pedestrian refuges has seen only two (2) mid-block pedestrian accidents from 1991 to the present. What the programs do require, is commitment. Commitment from the road authority to provide funds, personnel and expertise AND to see the program "through" so that the community can see the results. Commitment is also required from the community who must be coerced, persuaded, cajoled and encouraged by various means to actively participate.
- 168 From presentations given to the Committee, inspections made of the programs in action, and discussions held with VICROADS officers, there seems little doubt that the programs in Victoria are working. Whilst the programs may require substantial funds in the development and initial implementation stages, the benefits to the community will also be substantial. Pedestrian fatalities represent 18% of the annual state road toll in Queensland and a reduction of this figure will also provide substantial community benefits and cost savings. If programs such as those developed by VICROADS can achieve these savings and benefits; perhaps not by themselves, but in conjunction with other road safety countermeasures, money spent on them is money wisely spent.
- 169 Considerable funds and effort is expended by authorities to enhance cyclist safety throughout Queensland. Cyclist fatalities represent about 4% of the road toll. In the Committee's view, it is time for funds and effort to also be directed towards addressing the pedestrian accident problem. Programs similar to those developed in VICROADS; similar in all respects; would go a long way towards addressing this important road safety problem.

Recommendation 26

The Committee recommends that Queensland Transport conduct a detailed study into the pedestrian accident problem in Queensland. Wide community consultation shall be integral to the study and appropriate countermeasures, community-based prevention programs, and engineering solutions, should be developed and implemented as tangible outcomes of the study. These outcomes should accurately reflect community needs and expectations.

Ministerial responsibility:
· Minister for Transport

STRATEGIC OUTLOOK

- 170 The recently released "*Queensland Road Safety Strategy - 1993-2003*" establishes the broad framework within which road safety countermeasures will be developed in Queensland over the next decade. As stated in the document (p.3) "*it represents a 10 year road safety strategy for better planning and better resource targeting of road safety in Queensland*". Road authorities throughout Australia have developed, or are developing, similar documents.
- 171 The Queensland Road Safety Strategy aims to achieve "*an almost 30% reduction in the annual road toll*" (p.5), through programs and actions outlined under six (6) key objectives. All but one (1) of these objectives state strategies and actions aimed at enhancing the safety of pedestrians and cyclists. Many of the recommendations made in this report reflect these strategies and actions. The Committee supports the development and documentation of a Queensland road safety strategy. It represents a commitment by the Queensland Government and Queensland Transport to reducing road trauma through a structured, long-term approach to improving road safety. Future evaluations of countermeasures and programs resulting from this strategy will determine its success. In part, the document also serves to reaffirm the Committee's belief that road authorities already have the knowledge, expertise and solutions to enhance the safety of pedestrians and cyclists; but such knowledge, expertise and solutions needs to be more widely applied and implemented. The challenge for Queensland Transport is to transform the strategies and actions into programs, infrastructure and perhaps more importantly, results.
- 172 One of the main strategic issues of concern to the Committee is the apparent lack of a strategic co-ordination, development and management of the entire road network. The word "apparent" is deliberately used as many examples exist in evidence heard by the Committee, of insufficient consultation between authorities; between authorities and community stakeholders; and between authorities and the wider community (the Committee also heard examples of where consultation was good). The most common problem was that consultation often occurred after the event, not prior to it. Perhaps less emphasis should be placed on declared/undeclared road dichotomies and greater emphasis placed on establishing a formal process or structure which demands wider consultation BEFORE infrastructure development proceeds. The process should also identify the controlling road authority.
- 173 Linked with such an approach is the need to integrate appropriate land use planning principles with road network and community development. This would particularly advantage unprotected road users (pedestrians and cyclists) as roads, residential developments and commercial developments which place greater emphasis on the needs and safety of pedestrians and cyclists, should result. Conducted thoroughly, effective land-use planning will facilitate the safe co-existence of ALL modes of traffic and encourage the use of modes of transport other than private motor vehicles. It will also help ensure that the desire by road authorities to maximise traffic throughput does not over-ride the safety and infrastructure needs of our most vulnerable road users: pedestrians and cyclists.
- 174 At a lower level, strategic plans for the development and implementation of pedestrian and cyclist infrastructure is desperately needed. Queensland Transport programs, mainly addressing cyclist needs, do exist; some provincial cities have Strategic Bikeway Plans; and other local authorities have volunteer community road safety consultative committees. This effort needs considerable expansion, financial support and encouragement in order to achieve acceptable safety improvements. The Committee received a copy of a comprehensive Strategic Bikeway Plan for Rockhampton during its public hearing in that city on 29 April 1993. It was produced at a modest cost; it is fully costed for staged implementation; and it provides a blue print from which Council can incrementally provide safe cyclist facilities. The Committee noted the recent launch of a study, commissioned by the Brisbane City Council, to produce the "*1993 Bicycle Brisbane*"

Plan" (The Courier-Mail, 9.6.93, p.47). In announcing details of the study, Ald. Mellifont was quoted as saying (The Courier-Mail, 9.6.93, p.47):

"The study will develop a strategy to identify and provide safe and functional bicycle facilities and improve cycling opportunities in Brisbane."

- 175 The Bicycle Brisbane Plan aims to provide safe, functional bicycle facilities which can be implemented both now and in the future. Through the provision of these facilities, the plan aims to establish cycling as a legitimate, viable, alternative means of transport. Ideally, this will reduce dependence on the private motor vehicle. Strategies to educate and encourage the community to increase bicycle usage will also form part of the plan. Importantly, the plan will concentrate on identifying facilities required for safer commuter cycling with recreational facilities being improved where necessary.
- 176 Such a strategic plan should be a priority for any city, town or local authority where cyclists exist in sufficient numbers. The plan would clearly identify priorities for infrastructure development, detail an integrated, interconnected bicycle route system linking major attractions with residential areas, and determine the level of funding required to implement the plan over a nominated period of time. As funds become available, the next group of priorities detailed in the plan, are addressed. There is no reason why such a plan could not incorporate the needs of pedestrians. Alternatively, a separate strategic plan for provision of pedestrian infrastructure could be provided.
- 177 One of the important effects of developing such plans is that road authorities will be encouraged to significantly raise the priority of infrastructure development and provision, for pedestrians and cyclists. This planning process will help redress the over-emphasis on designing and constructing a road network to satisfy the needs of motorists. The safety needs of pedestrians and cyclists MUST be incorporated at the very beginning of the planning process so that infrastructure, reflecting the needs and vulnerability of pedestrians and cyclists, is provided.
- 178 The Committee notes the development of a National Bicycle Strategy. Similarly, it is aware of Queensland Transport developing a bicycle strategy for Queensland. In developing these strategies, it is important that representatives of the community for whom the strategies are developed, are consulted and actually involved in the process. In evidence, the Bicycle Institute of Queensland (BIQ), a volunteer organisation established to represent the interests of Queensland cyclists, suggested the formation of a State Bicycle Advisory Committee. Although the BIQ has links with government agencies, formalisation of these links for on-going consultation and benefit, needs to occur. This State Bicycle Advisory Committee would include representatives from key stakeholder groups including Queensland Transport, Police, Local Authorities, Community Groups, and other relevant interest groups and government agencies. Road authorities could consult the Committee to ensure cyclist's needs are incorporated into infrastructure development. Similar committees exist in other States and could perhaps be used as models for establishing this committee in Queensland.

179 Addressing the safety needs of pedestrians, in a consultative strategic sense, is more difficult. Throughout the inquiry, the Committee noted a distinct lack of peak bodies representing the safety needs of pedestrians. Road authorities would need to determine how the community could best represent the safety needs of pedestrians. The findings of the pedestrian safety study recommended by the Committee in this report would prove valuable. The Pedestrian Accident Project Report No.6 (Alexander, Cave and Lyttle 1990, p.iv) identified the high-risk pedestrian accident groups as having similar characteristics:

- *"they are all socially vulnerable road user groups, which suggests that the community should accept some responsibility for the reduction of their high accident risks;*
- *they are all characterised by reduced road use abilities;*
- *the accidents tend to occur in areas close to their homes and in familiar local surroundings."*

180 According to the authors (p.iv):

"These three characteristics indicate that the road safety programs mentioned earlier may be best administered at a local level by individual municipalities. Programs could then be tailored to cater for the special conditions of individual municipalities, and could be integrated into the broader services provided by them."

181 The road safety programs referred to in the above quote are described, in general terms, on the previous page of the report. The programs to emerge from these general descriptions were Walk With Care, Safe Routes to School, and Responsible Serving of Alcohol.

182 An important component in enhancing the safety of both Pedestrians and Cyclists is the use of public transport. Strategies must be developed which effectively promote and facilitate the use of public transport. For cyclists, this would mean strategies for the successful integration of the two (2) forms of transport. For pedestrians, it would involve strategies for ensuring access to public transport. The convenience, safety and benefits of public transport needs to be communicated to the community at large.

183 In summary, the Committee believes that a structured process which guarantees consultation with representative cyclist groups must be developed. A similar process to ensure representation of pedestrian needs must also be developed. Provincial cities and local authorities must develop strategic plans for the provision of appropriate pedestrian and cyclist infrastructure.

Recommendation 27

The Committee recommends that Queensland Transport facilitate the formation of a State Bicycle Advisory Committee. The main role of the State Bicycle Advisory Committee will be to ensure appropriate cyclist safety facilities are provided with any new or upgraded infrastructure as well identifying and prioritising cyclist safety infrastructure needs of the existing road network. Its membership should comprise representatives from all key community stakeholder groups. Part of the charter of the State Bicycle Advisory Committee shall be to consider the formation of Regional Committees. Existing volunteer bicycle safety advisory community committees should be consulted by the State Committee or incorporated into any system of Regional Committees.

Ministerial responsibility:

- Minister for Transport

Recommendation 28

The Committee recommends that Queensland Transport establish a formal process which shall ensure the provision of pedestrian safety facilities in all new or upgraded infrastructure.

Ministerial responsibility:

- Minister for Transport

Recommendation 29

The Committee recommends that all provincial cities and local authorities develop separate strategic plans for the provision of pedestrian and cyclist infrastructure.

Ministerial responsibility:

- Minister for Housing, Local Government and Planning

SUMMARY OF RECOMMENDATIONS

Data Collection

Recommendation 1

The Committee recommends that more comprehensive data collection systems be developed so that information on unreported road accidents, much of which is available from the Accident and Emergency department of major hospitals, is utilised in analysing road accidents. This would be particularly useful for gathering data on accidents involving pedestrians and cyclists. Combined with the official Police data on reported accidents, a more comprehensive and accurate picture of the road accident problem, would emerge. The system used by the Queensland Injury Surveillance Prevention Project (QISPP) is an example of one method of capturing this data.

Ministerial responsibility:

- Minister for Transport
- Minister for Health

Recommendation 2

The Committee recommends that the Traffic Act be amended to permit Blood Alcohol Content (BAC) testing of persons who attend hospital for treatment of injuries sustained in fatal and/or injury road accidents. This would assist in establishing correct medical procedures and in statistic gathering which is essential for road safety purposes.

Ministerial responsibility:

- Minister for Transport
- Minister for Health

Road Safety Education

Recommendation 3

*The Committee recommends that **all** Queensland primary schools have a sufficient number of teachers who have been trained in how to teach the Bike-Ed program. The Department of Transport and the Department of Education should then investigate ways of incorporating the Bike-Ed Program into the education curriculum to ensure that **all** Queensland primary school children receive bicycle education. The program should also emphasise the impact and safety needs of other road users. Furthermore, training in how to teach Bike-Ed should be a compulsory component of tertiary teacher training courses.*

Ministerial responsibility:

- Minister for Transport
- Minister for Education

Recommendation 4

The Committee recommends that other road safety instruction should continue throughout Primary School. Road Safety should be taught in high school as a formal subject of the education curriculum. Completion of the appropriate road safety subject/s would lead to a certificate in road safety. For those without a certificate, or those who do not complete high school, a TAFE course should be developed and available. The certificate from High School or the TAFE course would be a pre-requisite to obtaining a learner's permit for driving.

The High School subject and TAFE course developed should teach a philosophy of safe driving, safe road behaviour at all times, and prepare people for driving amongst, and coping with, all road users, BUT particularly pedestrians and cyclists. Course participants need to be made aware of the role of speed in increasing the severity of injuries, and the behaviour, actions and other factors impacting on the safety of pedestrians and cyclists.

Ministerial responsibility:

- Minister for Transport
- Minister for Education
- Minister for Employment, Training and Industrial Relations

Recommendation 5

The Committee recommends that Local Authorities and community groups of large provincial cities or towns be encouraged to establish off-road bicycle training areas, on the model of existing facilities in Townsville, Maryborough and Gympie.

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning

Speed Limits**Recommendation 6**

The Committee recommends that the general urban street speed limit be reduced to 50 km/h. The speed limit of 40 km/h should continue to be used around schools and in residential areas where the lower speed limit is supported by the installation of physical engineering devices. The use of a 40 km/h speed limit should be extended and applied in areas where pedestrian numbers are high (e.g. shopping centres and sporting, recreational and entertainment venues; around hospitals); and in areas frequented by elderly pedestrians.

Ministerial responsibility:

- Minister for Transport

Recommendation 7

The Committee recommends that Queensland Transport review the Schoolsafe Program with regard to:

- . the variable size of the speed limit signs;*
- . the amount of information displayed on the signs;*
- . determining the optimum location of the speed limit signs so that motorists receive adequate notice;*
- . the suitability of the times during which lower speed limits apply;*
- . the use of lower speed limit signs which are only displayed during the period of operation of the lower speed (signs could be changed by School Crossing Supervisors);*
- . the use (where justified on the grounds of increased accident risk) of flashing lights to provide further warning to motorists that they should reduce their travelling speed and proceed with caution.*

The area affected by the lower speed limit, the location of the speed limit signs, and the times during which the lower speed limit operates should all be determined in consultation with the school, local authority and any other community stakeholders.

Ministerial responsibility:

- Minister for Transport

Recommendation 8

The Committee recommends that general speed limits in urban areas be rigidly enforced, and especially where motorists are given a clear indication that a reduction in speed is required (eg turning into a residential street or precinct).

Ministerial responsibility:

- Minister for Police

Engineering

Recommendation 9

The Committee recommends that road authorities prepare a plan which provides for more widespread implementation of known and proven engineering devices, which enhance pedestrian and cyclist safety. In particular, the Committee recommends that authorities give priority to:

- installing more signalised pedestrian crossing points on major and/or multi-lane roads as part of a co-ordinated system of traffic signals which creates platooning of traffic;*
- eliminating zebra crossings on multi-lane roads;*
- installing median refuges, particularly on multi-lane roads, which can be used by both pedestrians and cyclists;*
- greater use of barrier fencing and/or planter boxes to prevent pedestrian and cyclist crossings at uncontrolled areas and to channel pedestrians and cyclists towards safer crossing points;*
- greater attention given to the location of bus stops to ensure the safety of school children who are required to cross the road when catching or leaving a bus;*
- longer pedestrian crossing phases in areas where elderly and very young pedestrian numbers are high;*
- installing bicycle-activated detector loops in designated bicycle lanes at traffic signals;*
- eliminating drainage grates which run parallel to the kerb, raised manhole covers on the roadway, and gaps between the road pavement and concrete gutters;*
- providing road space for cyclists where they are to be integrated with other road traffic through the use of exclusive bicycle lanes, wide kerbside lanes or shared lanes;*
- sealing road shoulders to the same level and standard as the road;*
- appropriate treatments where bicycles rejoin the road from separated bikeways or shared footways;*

Ministerial responsibility:

- Minister for Transport*
- Minister for Housing, Local Government and Planning*

Recommendation 10

The Committee recommends that Pelican crossings be introduced.

Ministerial responsibility:

- Minister for Transport

Road Hierarchies and Planning**Recommendation 11**

The Committee recommends that local authorities prepare a strategic plan for the establishment of a road hierarchy and adhere to it. The strategic plan should be approved by the Department of Housing, Local Government and Planning and be used by local authorities as the basis of approval for future development. The road hierarchy should incorporate the safety needs of pedestrians and cyclists so that these needs are not forgotten in new subdivisions. The road hierarchy should also facilitate the implementation of effective public transport systems as one means of improving road safety.

Ministerial responsibility:

- Minister for Housing, Local Government and Planning

Recommendation 12

The Committee recommends that authorities place a significantly higher priority on providing infrastructure which addresses the safety needs of pedestrians and cyclists, when establishing transport corridors, upgrading or modifying existing roads, and implementing local area traffic management schemes on existing road networks. Safety audits must be rigorously carried out at the early planning and design stages to ensure pedestrian and cyclist safety needs have not been forgotten.

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning

Footpath Cycling

Recommendation 13

The Committee recommends that all cyclists, skateboarders and rollerbladers be banned from riding on:-

- *footpaths in Central Business District (CBD) areas;*
- *footpaths in Shopping Centres;*
- *footpaths in Strip Shopping areas;*
- *footpaths in Shopping Malls;*
- *footpaths in the vicinity of retirement villages or areas where elderly people widely use footpaths;*
- *footpaths where the presence of cyclists, skateboarders and rollerbladers on footpaths represent a significant danger to pedestrians, or where pedestrian numbers on footpaths are high.*

The Committee further recommends that Local Authorities be empowered to determine the areas where a ban on cyclists, skateboarders and rollerbladers exists and to sign those areas accordingly.

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning
- Minister for Police

Recommendation 14

The Committee recommends that in the construction of new footpaths and dual-use pathways, consideration be given to providing sufficient pavement width for the safe travel of pedestrians and cyclists. These facilities should be clearly signed, and delineated where appropriate.

Ministerial responsibility:

- Minister for Housing, Local Government and Planning

Promotion/Publicity

Recommendation 15

The Committee recommends that Queensland Transport develop an enterprising, innovative and intensive promotional campaign aimed at parents, to remind them of their parental responsibility for the safety of their children as both pedestrians and cyclists. The campaign should include warnings to parents of the dangers of allowing young children under 10 to ride on public roads and should encourage parents NOT to allow this practice without prior or on-going adult supervision.

Ministerial responsibility:

- Minister for Transport

Enforcement of Traffic Laws on Cyclists

Recommendation 16

The Committee recommends that the Traffic Act and, where applicable, local authority by-laws, be amended to clearly state that bicycle helmets must be worn when cycling in all places other than private property. This would mean all public places and include, for example, public parks, bicycle paths through parks and recreation areas, shopping centre car parks and separate bicycle paths.

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning

Recommendation 17

The Committee recommends that current levels of enforcement for all bicycle offences be maintained. In particular, those groups of cyclists with lower helmet wearing rates, should be targeted.

Ministerial responsibility:

- Minister for Police

Recommendation 18

The Committee recommends that the Traffic Act be amended to provide for cyclists being subject to the same random breath testing (RBT) procedures as motorists.

Ministerial responsibility:

- Minister for Transport

Recommendation 19

The Committee recommends that the legal and operational considerations of giving Police the power to impound a bicycle if the cyclist is riding in an unlawful manner, be investigated.

Ministerial responsibility:

- Minister for Transport

Safety Features of Bicycles**Recommendation 20**

The Committee recommends that all new and used bicycles available for sale at retail outlets be equipped with a bell, headlight, tail light, reflectors and independent brake as standard minimum safety requirements.

Ministerial responsibility:

- Minister for Consumer Affairs

Recommendation 21

The Committee recommends that the Australian Standards be revised so as to account for the use of flashing tail lights.

Ministerial responsibility:

- Minister for Transport

Recommendation 22

The Committee recommends that any legal impediment to the use of flashing tail lights of sufficient quality, be removed.

Ministerial responsibility:

- Minister for Transport

Recommendation 23

The Committee recommends that provisions in the Traffic Regulation 1962 which require bicycles to have certain items of safety equipment be reviewed. The Police should be given power to impound a bicycle which does not comply with these provisions. The penalty for not complying with these provisions should be revised. The offence for non-compliance should be included in the Offence Notice System for cyclists.

Ministerial responsibility:

- Minister for Transport
- Minister for Police

Recommendation 24

The Committee recommends that community organisations be encouraged to use bulk purchase schemes to reduce the price of flashing tail lights used by cyclists. This will encourage cyclists to purchase them as an aid to conspicuity.

Ministerial responsibility:

- Minister for Consumer Affairs

Infrastructure/Facilities for Cyclists***Recommendation 25***

The Committee recommends that significantly more on-road and off-road infrastructure, which will make cycling safer and more appealing, be provided. This must be done before cycling can be actively and effectively encouraged as an alternative means of transport. The main infrastructure needs are:

- safe, practical and convenient routes to inner city areas using an appropriate mix of known safe on-road and off-road facilities;*
- end-of-trip facilities at places of employment such as secure parking and storage facilities, showers and change rooms;*
- secure, convenient parking and storage facilities for bicycles at schools, shopping centres, public transport interchanges, and other public places:*
- networks of bicycle paths which connect major local attractions and facilities such as, for example, Schools, TAFE colleges, Universities, Recreation Areas, Shopping Centres, Community Centres, and Sporting Venues; and*
- improving the riding surface of roads so that on-road cycling is safer.*

Ministerial responsibility:

- Minister for Transport
- Minister for Housing, Local Government and Planning
- Minister for Employment, Training and Industrial Relations
- Minister for Business, Industry and Regional Development

Prevention Programs

Recommendation 26

The Committee recommends that Queensland Transport conduct a detailed study into the pedestrian accident problem in Queensland. Wide community consultation shall be integral to the study and appropriate countermeasures, community-based prevention programs, and engineering solutions, should be developed and implemented as tangible outcomes of the study. These outcomes should accurately reflect community needs and expectations.

Ministerial responsibility:

- Minister for Transport

Strategic Outlook

Recommendation 27

The Committee recommends that Queensland Transport facilitate the formation of a State Bicycle Advisory Committee. The main role of the State Bicycle Advisory Committee will be to ensure appropriate cyclist safety facilities are provided with any new or upgraded infrastructure as well identifying and prioritising cyclist safety infrastructure needs of the existing road network. Its membership should comprise representatives from all key community stakeholder groups. Part of the charter of the State Bicycle Advisory Committee shall be to consider the formation of Regional Committees. Existing volunteer bicycle safety advisory community committees should be consulted by the State Committee or incorporated into any system of Regional Committees.

Ministerial responsibility:

- Minister for Transport

Recommendation 28

The Committee recommends that Queensland Transport establish a formal process which shall ensure the provision of pedestrian safety facilities in all new or upgraded infrastructure.

Ministerial responsibility:

- Minister for Transport

Recommendation 29

The Committee recommends that all provincial cities and local authorities develop separate strategic plans for the provision of pedestrian and cyclist infrastructure.

Ministerial responsibility:

- Minister for Housing, Local Government and Planning

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APPENDIX B - List of Submissions Received

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LEICHHARDT QLD 4305

Mr/s L Loumark
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Redland Shire Council
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CLEVELAND QLD 4163

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Logan City Council
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WOODRIDGE QLD 4114

Mr A Jewell
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LUTWYCHE QLD 4030

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RED HILL QLD 4059
Dr Copeman

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Superintendent of Police
State Traffic Support Group
Queensland Police Service
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Mr H L Camkin
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APPENDIX C - Witnesses Who Presented Evidence at Public Hearings

CAIRNS - MONDAY 27 JULY 1992

Mr Lyall Ford	Acting Regional Director	Department of Transport Townsville (normally District Manager, Cairns)
Mr Alan Richmond	Acting District Manager	Department of Transport Cairns (normally Manager of Preconstruction Activities Department of Transport Cairns)
Mr Jim Beck	Road Safety Consultant	Department of Transport Cairns
Mr Michael Bryan	Chairman	Cairns/Mulgrave Bicycle Safety Advisory Committee
Mr Robert Waters	Senior Sergeant Officer in Charge Traffic Co-ordinator	Police Cairns District Traffic Branch Far Northern Police Region
Mr Wayne Patterson	Branch Manager	RACQ
Mr Ken Ernst		Cairns High School
Ms Judy Green		Cairns High School
Ms Gwen Connolly		St Augustines College
Mr Russ Pasterell	Principal	Caravonica Primary School
Mr Ian Cannons	President, P & C	Caravonica Primary School
Mr Llew Davies	Deputy Principal	Balaclava Primary School
Mr Brian Smythe	Manager	Planning & Operations Cairns City Council
Mr Colin Tritton	President	Cairns Cycle Club Incorporated

MARYBOROUGH - THURSDAY 30 JULY 1992

Mr Vernon Lever-Shaw	City Engineer	Maryborough City Council
Mr Donald Stone	District Manager	Department of Transport Bundaberg
Mr Kerry Laufer	Manager (Technical Services)	Department of Transport Bundaberg
Mr Neville Winter	Road Safety Consultant	Department of Transport Maryborough
Mr Dallas Bargenquest	Manager (Technical Services)	Department of Transport Wide Bay District
Mr Les Ison		Maryborough Bike Plan Advisory Committee Granville Area P & C
Ms Nan Ott	Secretary	Maryborough Bike Plan Advisory Committee Maryborough Branch QCPCA
Alderman Les York		Maryborough City Council
Ms Ann McLaney		Maryborough Bike Plan Advisory Committee Maryborough State High School P & C Maryborough Branch QCPCA
Sgt Rodney Lynch	Officer in Charge	Maryborough District Traffic Branch
Snr Cons Peter Webster		Maryborough Traffic Branch
Mr Leoll Barron	Principal	Maryborough State High School
Ms Nan Ott	President Parent Liaison Officer Chairperson	High School P & C Association Education Department High School Schoolsafe Committee
Mr Robert Oxenham	President	Maryborough Cycle Club

GOLD COAST, TOOWOOMBA, BRISBANE - 22-24 MARCH 1993

Mr Frits Olyslagers	General Manager	Sundowner Tours
Mr Geoff Todd	Managing Directory	Jellside Pty Ltd Gold Coast City Bus & Sundowner Scenic Tours
Mr Ray Trenaman	District Superintendent	(QAS) Gold Coast
Mr Greg Reaburn	Officer in Charge	Southport Ambulance Station
Mr Barry McGinnity	Chief Engineer	Gold Coast City Council
Mr Ian Morcombe	Traffic Engineer	Gold Coast City Council
Mr Richard Lam	Manager (Technical Services)	Department of Transport Moreton District
Mr Terry Plant	General Manager	Surfside Buslines
Snr Sgt Errol Dellit	Traffic Branch	Coomera Police Station

BRISBANE - TUESDAY 27 APRIL 1993

Mr Barry Collis	Co-ordinator of Road Safety	Department of Education
Dr Ian Mavor	Principal Policy Officer	Health and Personnel Development (Studies Directorate) Department of Education
Sgt David Lambert		Accident Investigation Squad Brisbane
Chief Superintendent Alan Honor		State Traffic Support Group Queensland Police Service
Inspector Michael Hannigan		State Traffic Support Group
Mr Robert Collins	Senior Research Officer	Local Government Association of Queensland
Mr Alan Meares	Director (Road Safety)	Department of Transport
Mr Doug Woodbury	Principal Manager	Road Vehicle and User Safety Branch Department of Transport

Mr Paul Shelton	Senior Engineer (Engineering Standards)	Design and Survey Branch Department of Transport
Mr John Hengelmolen	Senior Policy Adviser	Policy and Planning Unit Department of Transport
Mr Mark King	Manager	Road User Behaviour Section Department of Transport

BRISBANE - WEDNESDAY 28 APRIL 1993

Mr Doug Ward	Treasurer	Bicycle Institute of Queensland
Mr Ray Hembrow	Secretary	Bicycle Institute of Queensland
Mr Pedro Plowman	President	Bicycle Institute of Queensland
Associate Professor J Fred Leditschke		Department of Child Health University of Queensland
Mr Frank Fisher		Department of Geography and Environmental Science Monash University
Mr Brian Davis	Principal Engineer	Traffic Investigations and Design Traffic Planning Branch Brisbane City Council
Mr Paul Peters	Engineer	Traffic Investigations Traffic Planning Branch Brisbane City Council
Mr John Wikman	Traffic & Safety Engineer	RACQ
Mr Glen Merry	Chairman	Queensland Road Trauma Committee, Royal Australasian College of Surgeons

ROCKHAMPTON - THURSDAY 29 APRIL 1993

Mr Chris Head	Strategic Plan Co-ordinator	Rockhampton Bicycle Planning Group
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PARLIAMENTARY TRAVELSAFE COMMITTEE

Report No.	Title	Date Presented to Parliament
1.	Annual Report for the period 10 May 1990 to 30 June 1990.	5 September 1990
2.	The need for some form of compulsory periodic inspections of passenger vehicles as an effective means of reducing road crashes and the severity of associated injuries, AND The need to improve the standards of motor vehicle repairs as a means of improving vehicle and road safety.	4 December 1990
3.	Road Safety Education AND Traffic Law Enforcement	4 September 1991
4.	Annual Report for the period 1 July 1990 to 30 June 1991.	2 October 1991
5.	Bicycle Safety	28 November 1991
6.	Achieving High Levels of Compliance with Road Safety Laws - a review of road user behaviour modification	18 March 1992
7.	Road Environment and Traffic Engineering	28 April 1992
8.	Annual Report for the period 1 July 1991 to 30 June 1992	25 August 1992