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2005 Update

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Abstract

In actioning one of the recommendations to come out of the 2004 indigenous Road Safety Forum and Working Group, the ATSB commissioned ARRB Group to update the indigenous Road Safety Scoping Study that they had completed in 2003. The literature review and consultation process was revisited in an attempt to identify the current state of indigenous road safety in Australia. The data analysis was not revisited although the results of the original analyses are presented within this report.

The literature review identified data sources and limitations, such as difficulties defining 'indigenous status' and estimating base populations. Secondly, the review highlighted indigenous road safety trends in Australia, focusing specifically on known risk factors. Initiatives that have been, or are currently being, undertaken to address indigenous road safety issues (including community development, licensing, alcohol, restraint wearing, and vehicle purchasing) were identified during the consultation process.

Eleven recommendations for future research and priority areas for indigenous road safety in Australia were derived from the literature review and consultation processes.

Summary

Introduction

Although precise quantification of the road safety problem has been difficult, due to poor reporting of crashes and complexities with the identification of indigenous people, it has been estimated that indigenous Australians are over-represented in road fatalities by about three times (ATSB 2004; Brice 2000; Cercarelli 1997; Harrison et al. 2001; Moller, 1996; Moller et al., 1996).

In April of 2002 ARRB Transport Research, commissioned by the Australian Transport Safety Bureau (ATSB), began work with the Centre for Accident Research and Road Safety – Queensland (CARRS-Q) on a scoping study which investigated indigenous road safety issues in Australia through a comprehensive literature and research review, an analysis of crash data and consultation with road safety authorities and indigenous authorities in each jurisdiction. The resultant report was completed in December of 2003.

Some noteworthy developments have occurred in indigenous road safety since the scoping project was commenced, and one of the recommendations arising from the 2004 Indigenous Road Safety Forum was an examination of the possibilities for updating the 2003 report. The ATSB commissioned ARRB Group Ltd (ARRB) to undertake the update.

Literature review

The literature review identified data sources and limitations, such as difficulties in defining 'indigenous status' and estimating base populations. Secondly, the review highlighted indigenous road safety trends in Australia, focusing specifically on known risk factors such as alcohol-impairment, overloading and roadworthiness of vehicles, and non-compliance with restraint legislation. Pedestrian crashes and single-vehicle crashes were also covered.

Crash data analysis

Indigenous road crash data were sought from all jurisdictions, although only databases for Western Australia, Queensland and Northern Territory identify indigenous involvement in road crashes. Road authority crash data from Queensland and Northern Territory were analysed. Data from Western Australia were drawn from reports by Cercarelli (1999) and the Aboriginal Road Users Taskforce (2002). The Australian Bureau of Statistics (ABS) provided data on national indigenous road fatalities.

Australia-wide fatality data

Analysis of the ABS data for the period from 1997 to 2000 showed that car occupants and pick-up occupants made up 57% of road fatalities, while pedestrians made up 40%. An examination of indigenous road fatalities by state, for the same period, revealed that Western Australia and the Northern Territory had the highest number of indigenous road fatalities.

Queensland

Analysis of the Queensland indigenous crash data for the period from 2000 to 2001 showed that 40% of crashes were single-vehicle run-off-road crashes (off path straight and off path curve) and 23% were pedestrian crashes.

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Northern Territory

Analysis of the Northern Territory indigenous casualty crash data for the period from 1996 to 2001 showed that a high proportion of crashes involved a pedestrian (33%) or vehicle overturning (25%), with other single-vehicle crashes accounting for a further 18%. Males made up 70% of the total number of casualties, while 36% of casualty crashes and 74% of fatal crashes were alcohol-related. Although restraint use data were incomplete, it appears that the numbers of casualties wearing and not wearing restraints were similar. However, 54% of fatalities were not wearing a restraint while only 8% were wearing a restraint (restraint use was not recorded for the remaining 38% of fatalities).

Western Australia

The Western Australian data for the period between 1988 and 1999 which was described by Cercarelli (1999) and the Aboriginal Road Users Taskforce (2002) showed that, compared to indigenous females, indigenous males had almost double the rate of hospitalisations and almost triple the rate of fatalities. Nearly half of the indigenous people hospitalised as a result of a crash were either passengers (27%) or pedestrians (19%). Over three-quarters of the crashes that resulted in the hospitalisation or death of an indigenous person were 'hit pedestrian' (25% deaths, 30% hospitalisations), 'hit object' (19% deaths, 26% hospitalisations), or 'non-collision' (33% deaths, 24% hospitalisations).

Rural and urban comparisons

Analysis of the Northern Territory data for the period from 1996 to 2001 revealed that the number of indigenous casualty crashes in rural and urban areas was similar (49% and 51% respectively). However, 67% of fatal crashes occurred in rural areas. Western Australian data for the period between 1988 and 1996 suggested that fatality rates were similar for rural indigenous and urban indigenous residents, but that rural residents were more likely to have been hospitalised due to a crash. Although the Queensland data did not allow for direct urban/rural comparisons, a breakdown of casualty accidents by speed limit revealed that around half (54%) of all crashes occurred on roads with a limit of 60 km/h (ie. typically urban roads), and over one-quarter (29%) occurred on roads with a 100 km/h limit (ie. typically rural roads).

Consultation

Consultations were undertaken with road safety authorities and indigenous organisations in each Australian jurisdiction and New Zealand, the United States of America and Canada. The consultations were designed to identify:

- indigenous crash data: availability, recording and reliability issues
- key road safety issues for indigenous populations in each jurisdiction
- road safety programs
- indigenous road safety research
- gaps in indigenous research
- promising initiatives to address indigenous road safety issues.

indigenous status is only recorded in Queensland, Western Australia and Northern Territory crash databases. In other jurisdictions hospital data (cause of injury), coupled with usual place of residence, is used. It was generally acknowledged that improvements in data quality and availability would be beneficial in determining the nature of crashes involving indigenous Australians and therefore in guiding the development of appropriate countermeasures.

The following road safety issues were reported to be of particular concern to the stakeholders consulted:

- alcohol misuse
- non-restraint use and riding in open load spaces
- unsafe pedestrian behaviour
- inadequate road conditions/remoteness
- sharing the road with trucks
- low licensing rates
- fatigue (to a lesser degree).

Initiatives that have been, or are currently being, undertaken to address indigenous road safety issues were identified during the consultation process. Initiatives addressing general road safety, community development, licensing, alcohol, restraint wearing, and vehicle purchasing were all identified. There is an emphasis on licensing programs in most jurisdictions, probably due in part to the fact that unlicensed driving is often linked with a lack of knowledge and training in safe driving. Despite the focus on licensing programs, there do seem to be a wide variety of road safety programs being delivered, aimed at several different aspects of road safety and a range of population groups.

The consultation did, however, reveal a need for more thorough evaluations of programs and initiatives, which can be difficult with the limited resources available to many of the programs identified. Despite the lack of formal evaluation, the consultation appeared to reveal that 'best practice' examples of road safety programs for indigenous Australians often involve group work and interactive learning, which may be most effective if led by a community-based road safety educator.

Several current and proposed projects were identified during the consultations, including:

- An injury prevention program entitled 'Safe Koori Kids.' The program will use a community capacity-building approach.
- An Offence Targeting Project which aims to reverse the over-representation of Aboriginal people in the criminal justice system.
- An examination of ways to encourage police to record ethnicity.
- A PhD examining the trip characteristics of indigenous crashes.
- Research to quantify cultural and environmental contributors to indigenous crash involvement.
- The *HealthInfoNet Indigenous Road Safety Website* was launched in December 2005.
- An investigation of alternative transport options for Aboriginal people including community-run transport.
- Examination of seatbelt wearing in First Nations and Aboriginal communities.

More information on these and other projects is provided within Table 3.

Overseas practice

Material relating to indigenous road safety issues within New Zealand, the United States of America and Canada was identified during the literature review and the consultations. While it seems that Canadian efforts are just beginning to gain momentum, the emphasis in New Zealand and the United States appears to be on community ownership of road safety initiatives. The emphasis on community ownership appears to be based on the principle that community members are in the best position to identify and address problems within their own communities.

Recommendations for future research and priority areas

Some of the recommendations put forward during the original scoping study have been addressed since the report was written. For example, it was recommended that protocols for undertaking research in indigenous communities should be developed. In 2003, the National Health and Medical Research Council's (NHMRC) Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research were released. These provide comprehensive guidance on the planning and conduct of research involving indigenous persons, and have been developed over a number of years through partnerships which have included indigenous communities.

It was also recommended that crash sites be geo-coded to enable crash data analyses to include spatial characteristics of the crash environment. Most Australian jurisdictions now geo-code crash sites, making such analyses possible. It was also recommended that a national co-ordinated approach to future research, with knowledge being distributed to all jurisdictions be adopted. Although this recommendation is still relevant, the *HealthInfoNet Indigenous Road Safety Website* (Section 7.6) should assist in the achievement of this goal.

Recommendations for future research and priority areas (with those retained or updated from the original scoping study presented in bold type) include:

1. **Improve the quality of indigenous road safety data by developing nationally consistent and valid practices for identifying indigenous status and establish accurate estimates of indigenous populations (Sections 3.1 and 7.1).**
2. **Use recently available geo-coded crash data to identify high-risk crash locations and interrogate the National Coronial Information System to provide new information on the characteristics of crashes involving indigenous Australians (Section 7.1).**
3. **Monitor progress in terms of known risky practices such as unlicensed driving, non-restraint use, drink driving and unsafe pedestrian behaviour (Section 3.2).**
4. **Research the historical and cultural factors influencing the beliefs and perceptions indigenous people hold regarding health/injury, the acquisition of health knowledge, road safety and transport (Section 7.2).**
5. **Adhere to appropriate protocols for research in indigenous communities (such as those described in NHMRC's Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research) (Section 7.3).**
6. **Undertake formal evaluations of road safety initiatives undertaken at the local level to determine their impact on indigenous road safety outcomes and identify critical elements for success (Section 5.3).**
7. **Develop links between indigenous road safety practitioners and researchers and those from other areas such as health promotion and disciplines within indigenous health (Section 3.2).**
8. **In accordance with the NHMRC and Council of Australian Governments (COAG) principles, ensure that programs developed are tailored to the community in which they are to be applied. This implies community participation in developing road safety programs and in selecting which issues should be targeted (Sections 7.3, 7.4 and 7.5). Indigenous Coordination Centres, which oversee most of the Australian Government's Indigenous programs and negotiate Shared Responsibility Agreements with indigenous people and communities could play a key role in this process.**
9. **Continue to facilitate the employment of indigenous people in road safety related positions (Section 7.9).**

- 10. Introduce and enforce legislation to address riding in the open load space of vehicles (Section 7.7).**
- 11. Continue to provide accessible licensing systems for offenders and remote communities (Sections 5.3 and 7.8).**

Although crash statistics reveal that more needs to be done to address indigenous road safety issues, it seems that Australia is heading in the right direction. As such, several of the recommendations now pertain to the continuation of an existing activity rather than its commencement. Recommendation 11, for example, reflects the fact that accessible licensing systems for offenders and remote communities are currently being developed and that many others have been operating, apparently successfully for some time. Thus, the recommendation is for this to continue rather than for such systems to be provided, as was the original recommendation. Recommendations 9 and 10 below have been similarly altered to reflect progress in the development of programs which facilitate the employment of indigenous Australians in road safety related positions and progress in legislation aimed at discouraging risky practices such as riding in open load spaces. Recommendation 8 is also not new but it appears that the need for community participation in the development of programs designed for indigenous communities is now widely recognised.

Actions that will address Recommendation 3 are being initiated by the Indigenous Road Safety Working Group which are investigating the types of data which could be used to establish baseline data for restraint use, alcohol-related road trauma, licensing rates, pedestrian crashes and infrastructure improvements.

Sustained funding and government commitment will serve to promote the occurrence of many of the above-recommended actions, most of which could fit comfortably with existing State road safety strategies and action plans. The development of a national indigenous road safety strategy is not seen to be appropriate to address indigenous road safety. However some initiatives, such as monitoring progress, will benefit from coordination at the national level.

In terms of improving indigenous road safety in Australia, the general consensus appeared to be that a national approach would be less effective than State Action Plans and local working groups (overseen by a national group) which is the current approach. It was also apparent that indigenous road safety is typically seen to be the responsibility of transport and police authorities working in partnership with peak indigenous agencies and individual communities.

Contents

Summary	vi
1 Introduction.....	1
1.1 Background	1
1.2 Project objectives and tasks	2
2 Method.....	4
2.1 Literature review	4
2.2 Crash data analysis	4
2.3 Consultation.....	4
3 Literature review	7
3.1 Data limitations	7
3.1.1 Availability, consistency and linkage difficulties	7
3.1.2 Problems defining indigenous status	7
3.1.3 Critical analysis of official population statistics (Census data).....	7
3.1.4 Shortcomings of health data and injury classification systems.....	8
3.2 Indigenous road trauma: Overview of the problem.....	9
3.2.1 Comparative crash risk of indigenous Australians	9
3.2.2 High-risk modes of transport.....	10
3.2.3 Behavioural risk factors	10
3.2.4 Environmental and post-crash risk factors	12
3.2.5 Vehicular risk factors	13
4 Crash data analysis	15
4.1 Australia-wide fatality data	15
4.2 Queensland data	20
4.3 Northern Territory data.....	23
4.4 Western Australian data.....	29
5 Consultation to identify current initiatives and research	35
5.1 Sources and quality of crash data.....	35
5.2 Key road safety issues.....	35
5.3 Road safety programs	36
5.4 Current or proposed research.....	44

6	Overseas practice.....	46
6.1	New Zealand initiatives.....	46
6.2	United States of America initiatives.....	47
6.3	Canadian initiatives.....	48
7	Research and intervention priority areas	49
7.1	Improving the quality of indigenous road safety data	49
7.1.1	Monitoring progress in terms of known risky practices with existing data sources	50
7.2	Understanding of indigenous perspectives on health/injury, the acquisition of health knowledge, 'road safety' and transport	51
7.3	Research protocol in indigenous communities	52
7.4	Government commitment.....	53
7.5	Community participation and tailored community change strategies	54
7.6	Knowledge transfer	54
7.7	Legislation addressing riding in open load spaces.....	55
7.8	Accessible licensing and training systems for offenders and remote populations	56
7.9	Increased road safety knowledge and training.....	57
8	Summary	59
	References	60
	Appendix A - Consultation survey.....	70
	Appendix B - Consultation contacts	73
	Appendix C - Consultation findings	78

Tables

Table 1: Agencies consulted by jurisdiction	6
Table 2: Comparison of indigenous and non-indigenous road transport hospitalisations, for Western Australia 2001	10
Table 3: Initiatives to improve Indigenous road safety.....	37
Table 4: Licensing issues and potential solutions	57

Figures

Figure 1: Indigenous road fatalities by year: Australia-wide 1997-2000	15
Figure 2: Indigenous road fatalities by state: 1997-2000	16
Figure 3: Indigenous road fatalities by month: Australia-wide, 1997-2000	16
Figure 4: Indigenous road fatalities by road user group: Australia-wide, 1997-2000	17
Figure 5: All Australian road fatalities and indigenous fatalities by road user group: Australia-wide, 1997-2000	17
Figure 6: Indigenous road fatalities by age and sex: Australia-wide, 1997-2000.	18
Figure 7: All Australian road fatalities by age and sex: Australia-wide, 1997-2000	18
Figure 8: Indigenous car occupant fatalities by age and sex: Australia-wide, 1997-2000.....	19
Figure 9: Indigenous pedestrian fatalities by age and sex: Australia-wide, 1997-2000.....	19
Figure 10: Indigenous casualty crashes by year and severity: Queensland, 2000-2001.....	20
Figure 11: Indigenous Casualty Crashes by Month: Queensland, 2000-2001.....	21
Figure 12: Indigenous Casualty Crashes by Time of Day: Queensland, 2000-2001	21
Figure 13: Indigenous casualty crashes by speed limit: Queensland, 2000-2001	22
Figure 14: Indigenous casualty crashes by DCA: Queensland, 2000-2001.....	22
Figure 15: Indigenous casualties by age group and severity: Queensland, 2000-2001	23
Figure 16: Indigenous casualty crashes by year: Northern Territory, 1996-2001	24
Figure 17: Indigenous casualty crashes by month: Northern Territory, 1996-2001	24

Figure 18: Indigenous casualty crashes by day of the week: Northern Territory, 1996-2001	25
Figure 19: Indigenous casualty crashes by time of day: Northern Territory, 1996-2001	25
Figure 20: Indigenous casualty crashes by type: Northern Territory, 1996-2001	26
Figure 21: Indigenous casualty crashes by location and severity: Northern Territory, 1996-2001	26
Figure 22: Indigenous Casualty Crashes by involvement of alcohol: Northern Territory, 1996-2001	27
Figure 23: Indigenous casualties by sex and severity: Northern Territory, 1996-2001	27
Figure 24: Indigenous casualties by road user type: Northern Territory, 1996-2001	28
Figure 25: Indigenous casualties by restraint wearing: Northern Territory, 1996-2001	28
Figure 26: Road injury hospitalisations (per 100,000 population): Western Australia, 1988-1996	29
Figure 27: Road injury deaths: Western Australia, 1988-1999	30
Figure 28: Road injury hospitalisations by sex: Western Australia, 1989-1999 ...	30
Figure 29: Road fatalities by sex: Western Australia, 1989-1999	31
Figure 30: Road injury hospitalisation rates by age: Western Australia, 1989-1999	31
Figure 31: Road fatality rates by age: Western Australia, 1989-1999	32
Figure 32: Road injury hospitalisation rates by location: Western Australia, 1988-1996	32
Figure 33: Road fatality rates by location: Western Australia, 1988-1996	33
Figure 34: Nature of crashes resulting in the hospitalisation of indigenous people: Western Australia, 1988-1996	33
Figure 35: Hospitalisations of indigenous people by road user type: Western Australia, 1988-1996	34
Figure 36: Nature of crashes resulting in deaths of indigenous people: Western Australia, 1988-1996	34

1 Introduction

1.1 Background

Although precise quantification of the road safety problem has been difficult, due to poor reporting of crashes and complexities with the identification of indigenous people, it has been estimated that indigenous Australians are over-represented in road fatalities by about three times (ATSB 2004; Brice 2000; Cercarelli 1997; Harrison et al. 2001; Moller 1996; Moller et al., 1996).

The *National Road Safety Strategy 2001-2010* recognises that road safety for indigenous people is an issue of particular concern. The Australian Transport Safety Bureau (ATSB) commissioned the original scoping study on behalf of a working group at the National Road Safety Strategy, the Indigenous Road Safety Working Group.

In April of 2002, ARRB Transport Research and the Centre for Accident Research and Road Safety – Queensland (CARRS-Q), began work on a scoping study which investigated indigenous road safety issues in Australia through a comprehensive literature and research review, an analysis of crash data and consultation with road safety authorities and indigenous authorities in each jurisdiction. The resultant report was completed in December of 2003.

The *National Road Safety Action Plan for 2005 and 2006* calls for an approach to addressing indigenous road safety based on local consultation and action, facilitated by information sharing and co operation among jurisdictions, to identify and implement locally relevant initiatives to improve road safety outcomes for indigenous people.

The local initiatives will complement broader road safety measures in the Action Plan that will improve road safety for all Australians, including indigenous people. The Action Plan also lists a specific priority in this area: development of an Internet-based system to share information on indigenous road safety initiatives (the *HealthInfoNet Indigenous Road Safety Website*). A number of jurisdictions are contributing to this project. The lead agency, WA Office of Road Safety is managing a consultancy to develop the system. This work is to be accompanied by national forums on road safety for indigenous people.

The role of the ATSB has been to support continued collaboration among jurisdictions on indigenous road safety issues by:

- providing funding to assist the development and marketing of a video and CD road safety resource for use in indigenous communities (*Corrugations to Highways*)
- funding the 2003 scoping study of indigenous road safety and this update
- chairing an inter-jurisdictional indigenous road safety working group
- funding and supporting the development of the Internet-based information resource
- funding and providing administrative support for indigenous road safety forums in November 1999, June 2002 and September 2004 (a CD of the forum proceedings is available on request).

The ATSB, in partnership with the Northern Territory Department of Infrastructure and Planning, hosted the Indigenous Road Safety Forum in Alice Springs in September 2004. This forum examined progress in jurisdictions since the initial review and identified a number of issues requiring national attention. An overview of the Indigenous Road Safety Forum 2004 can be found at www.atsb.gov.au/road/hrss/indigenous.cfm

At the conclusion of the forum, the Aboriginal and Torres Strait Islander Road Safety Working Group recommended eleven actions (see below) which are to be monitored twice-yearly.

1. Provide information on forum outcomes to key stakeholders and place information on the website of the ATSB.
2. Submit a paper to the next meeting of the Standing Committee on Transport (SCOT) recommending that Ministers of the Australian Transport Council (ATC) be informed of forum outcomes.
3. Examine the feasibility of collecting improved and nationally consistent data on indigenous road trauma.
4. Implement changes and monitor progress in the following areas: improved data collection; increased licensing; increased seatbelt wearing, including child restraints; reduction in road trauma involving alcohol; improved infrastructure at high risk locations; and decrease in pedestrian risk.
5. Recognise the need to involve local communities when developing programs that target indigenous road safety.
6. Explore how links can be developed with other areas such as health and indigenous Coordination Centres.
7. Explore the availability of indigenous community language resources and make efforts to share these resources.
8. Support the development of the Internet information sharing project coordinated by Western Australia and, when finalised, widely advertise its availability.
9. Consider the inclusion in black spot programmes of specific funding to improve indigenous road safety.
10. Examine possibilities for updating some information in the report – Australian indigenous Road Safety – prepared by ARRB Transport Research Ltd and the Centre for Accident Research & Road Safety – Queensland (CARRS-Q).
11. Monitor progress on the above actions at twice-yearly teleconferences of the indigenous Road Safety Working Group and at the next indigenous Road Safety Forum.

Following on from Recommendation 10, the ATSB has commissioned ARRB Group Ltd (ARRB) to undertake this update.

1.2 Project objectives and tasks

Recent developments in indigenous road safety, that were not identified during the original scoping study, were identified through revisiting the literature review and consultation processes undertaken during the original scoping study. The objectives of this project were to:

- identify research conducted after 2001 that is relevant to road safety among indigenous Australians
- identify gaps in current information and research associated with road safety and indigenous Australians
- briefly examine developments in selected overseas countries
- recommend areas for future research into road safety issues relevant to indigenous groups
- identify promising initiatives
- combine new material with material contained within the original project report to produce a self-contained and current document.

In order to achieve these objectives, a literature review and consultations with representatives of road safety authorities and indigenous authorities in each jurisdiction were undertaken. The collection and analysis of crash data that were undertaken during the original study was not

revisited. Although more recent data will have become available since the original analyses were conducted, the new data would be unlikely to yield new or more reliable information since the inconsistency and incompleteness of crash data pertaining to indigenous populations, identified during the original scoping study, remains.

This report describes the methods by which the project tasks were undertaken and the outcomes of these tasks. It includes some of the information adapted from the original project report.

2 Method

The method through which each of the three project tasks was undertaken is described below. The project was managed by ARRB Group with assistance from CARRS-Q. The ARRB project team was responsible for managing the project, conducting the literature review and final reporting to ATSB. The role of the CARRS-Q project team was to consult with representatives of road safety authorities and report on the results of this task.

2.1 Literature review

The first task was to undertake a comprehensive review of literature and of research into road safety issues relevant to indigenous people in Australia. Literature published after 2001 and not covered within the original report was the focus of this part of the review. This literature review brought together material from a variety of sources, including:

- indigenous health (ATSI Health) and transport-related databases (Australian Transport Index, Transportation Research Information Service)
- the World Wide Web
- government reports regarding road safety policy and the broader health status of ATSI populations, including volumes 1 and 2 of the *Injury Prevention Activity Among Aboriginal and Torres Strait Islander Peoples Project Report* (Moller et al. 2003).
- the proceedings of the Indigenous Road Safety Forum and working group held in September 2004
- indigenous road safety initiatives and policy (eg. Brice 2000; McFadden, McKie & Mweesigye 2000).

In addition to a revisitation of the Australian material, overseas material was sought to provide an overview of the principles guiding the programs being implemented to address issues of indigenous road safety in three overseas jurisdictions.

2.2 Crash data analysis

Indigenous road crash data was sought from all jurisdictions, although only databases for Western Australia, Queensland and Northern Territory identify indigenous involvement in road crashes. Data from Queensland and Northern Territory were analysed but data from Western Australia were not available for use in this report. In order to provide an overview of indigenous crash characteristics in Western Australia, data were drawn from Cercarelli's (1999) report on road crash related casualties in Western Australia and from the Aboriginal Road Users Taskforce's (2002) discussion paper on Aboriginal road user safety in Western Australia. The Australian Bureau of Statistics (ABS) provided national data on indigenous road fatalities. Data were sought from other sources, mainly hospital records, but no additional data were forthcoming.

2.3 Consultation

In order to facilitate the sharing of knowledge, research, and programs across jurisdictions, a comprehensive consultation process was undertaken. The consultations were inclusive of road safety, health, and indigenous authorities from each Australian jurisdiction and overseas (New Zealand, the United States of America and Canada).

A brief online survey was sent to all attendees of the 2004 indigenous Road Safety Forum, plus a number of other people identified as key stakeholders. Telephone consultations were also undertaken with several stakeholders. The online survey (see Appendix A) examined:

- sources and quality of indigenous crash data in their jurisdiction (availability, recording and reliability issues)
- key road safety issues for indigenous populations in their jurisdiction (crash causal factors)
- past, present and/or future road safety programs in place, including program details, implementation processes and evaluation results
- current or future indigenous road safety research in their jurisdiction (including any identified gaps in the research)
- promising initiatives or programs to address local indigenous road safety issues in their jurisdiction.

The consultation process commenced in March 2005 and was completed in September 2005. This included circulating comments back to participants to ensure accuracy. In terms of data recording, consultations were not taped, with notes only taken. Where required, additional written information regarding action plans and programs was sought from participants for completeness. A list of agencies represented through at least one consultation is presented in Table 1. A list of stakeholders who provided information is presented in Appendix B.

Table 1: Agencies consulted by jurisdiction

Jurisdiction	Agencies consulted
Queensland	Queensland Transport Queensland Police Service Queensland Fire and Rescue Service CARRS-Q
New South Wales and ACT	Department of Health and Aging Roads and Traffic Authority Attorney Generals Department The George Institute for International Health STAYSAFE Committee
South Australia	Department of Transport and Urban Planning South Australia Police
Northern Territory	Charles Darwin University Department of Infrastructure, Planning and Environment Willowra Community
Western Australia	Department of Premier and Cabinet Shire of Derby/West Kimberley Roadwise Western Australia Police Mawarnkarra Health Service Aboriginal Corporation The University of Western Australia Edith Cowan University
Victoria	Vicroads Aboriginal Affairs Victoria Victoria Police
Tasmania	Department of Infrastructure, Energy and Resources Tasmania Police
International	Land Transport New Zealand University of Calgary Health Canada Alberta Aboriginal Affairs and Northern Development University of Colorado

3 Literature review

This literature review is presented in two sections. Firstly, limitations in available crash data are highlighted (Section 3.1). Secondly, the review highlights indigenous road safety trends in Australia, focusing specifically on known risk factors such as alcohol-impairment, overloading and roadworthiness of vehicles, and non-compliance with restraint legislation. Pedestrian crashes and single-vehicle crashes were also covered (Section 3.2).

3.1 Data limitations

3.1.1 Availability, consistency and linkage difficulties

One of the major problems facing road safety researchers has been the lack of appropriate and consistent data from which to draw meaningful conclusions about risk factors facing indigenous populations. For example, with the exception of Western Australia, health, transport and police data systems are not linked, so that it is difficult to link causal factors with injury outcomes (Moller & Cantwell 1999). Database linkages have the potential to greatly increase the quality and consistency of road crash data.

'Linked police, hospital and death records of road crash casualties provide accurate outcome information for casualties in crashes reported to the police. In addition, estimates of under reporting of different road user groups ... (eg. Indigenous populations)... can be made by comparing hospital records with and without a matching police record' (Rosman 2001 p.81).

There have also been calls to add to the types of information currently collected. Cameron and Oxley (1995) called for the inclusion of certain critical variables in both health and police (traffic incident) reporting systems. These include age, sex, indigenous status, type of crash, nature of the injuries sustained and treatment received. The South Australian Road Safety Advisory Council (2003) has suggested that restraint usage data should also be improved.

If databases are to be linked, a common variable must be employed in all data sets. After comparing different methods of computer-matching hospital data to police records, Rosman (1995) concluded that the casualty surname was the optimal identifier. Links to vehicle manufacturer records (ie. Vehicle Identification Numbers) would also allow injuries to be correlated with specific equipment fitted to individual vehicles and could provide valuable insight into vehicular factors contributing to both the incidence and severity of rural and remote crashes, including those involving indigenous persons (Cameron & Oxley 1995).

3.1.2 Problems defining indigenous status

The problems associated with cross-referencing or linking data from different sources are further exacerbated by the lack of a standard definition of indigenous status. While it appears conceptually simple to differentiate between indigenous and non-indigenous populations, there are virtually no tools available to accurately classify indigenous status. Classification of individuals as indigenous or non-indigenous is typically determined through self-report means with definitions broadly including: (i) persons of Aboriginal or Torres Strait Islander descent (ii) persons who identify as indigenous and (iii) persons who are accepted as such by the community in which they live (Office of Economic and Statistical Research [OESR] 2002).

3.1.3 Critical analysis of official population statistics (Census data)

Estimates of indigenous populations are based on Census data, estimated resident populations, or Australian Bureau of Statistics (ABS) experimental population projections. However, the

accuracy of these data sources is questionable (especially at the small area level) and, as such, must be treated with caution (Benham 1993; Benham & Howe 1994; Gray & Tetfaghiorghis 1993). Moller (1996), for example, argued that Census figures clearly underestimate the indigenous population as evidenced by post enumeration surveys.

Similar questions have been used to elicit self-report information on indigenous status since the 1981 census (the 2001 Census asked 'Is the person of Aboriginal or Torres Strait Islander origin?'). However, there have been substantial variations in the counts of indigenous peoples which cannot be fully explained by natural increase, that is, births and deaths (Ross 1999). According to ABS statistics (ABS 2002) the total population of Australia increased by six per cent between 1996 and 2001. During the same period, the number of people counted as indigenous in the census increased by 16%. It was reported that 12 percentage points were due to natural increase but that the remaining four percentage points were due to other factors. These factors include an increasing propensity to identify as indigenous (ABS 2002), changes in census editing procedures and changes in the rate at which couples in which one partner is indigenous identify their children as indigenous (Ross 1999).

As a result of the range of factors affecting estimates of indigenous populations as obtained through Census data, Moller (1996) and the OESR (2002) have urged government and indigenous injury prevention policy-makers to view official ABS population statistics critically, especially if used at a small area level, and to cross-check with other sources where possible.

3.1.4 Shortcomings of health data and injury classification systems

The validity and overall reliability of hospitalisation separation and health data for indigenous populations have also received attention (Brice 2000; Dolinis & Cripps 1996; McClure 1995; Moller & Tiong 1997).

'Several validation studies have shown that Aboriginal and Torres Strait Islander peoples are often significantly under enumerated in health related data collections and that the extent of under enumeration varies between State and Territories, regions, even between different hospitals ...' (Woodward & Bhatia 1996 cited in Moller, Dolinis & Cripps 1996 p.6).

Moller Thompson and Brooks (2003) suggest that there are three main reasons for this under enumeration:

- Some indigenous people are reluctant to identify themselves as such.
- Some indigenous people are reluctant to seek treatment for injury due to fear of repercussions from their own people or the government (Commonwealth Department of Health and Aged Care 2000; Gladman et al. 1997; Heslop et al. 2001; Streeter et al. 2003 as cited in Moller et al. 2003).
- Access to treatment varies from place to place (Gladman et al. 1997 as cited in Moller et al. 2003). McClure (1995) warned against using hospital data to extrapolate community estimates of injury because many indigenous crashes occurring in rural and remote areas are attended by paraprofessionals, general practitioners, indigenous health workers, the Flying Doctor Service or friends/relatives, as opposed to dedicated hospital staff.

Moller et al. (2003 p. 11) state that *'Data quality will only improve when prevention and treatment services are trusted and accessible, and when staff are confident to ask if a person is Aboriginal and Torres Strait Islander, and the person is confident to answer.'*

Harrison and colleagues (2001) highlighted the shortcomings of the injury classification systems used by hospitals. The tenth revision of the International Classification of Diseases (ICD-10) provides several hundred injury categories relating to land transport which describe the mode of

transport, road user status (that is, driver, passenger, etc.) and crash circumstances (National Centre for Classification in Health 1998). However, the categories provided are not particularly relevant to transport injury affecting indigenous Australians. Notable examples include injuries sustained by persons travelling in the open load-space of trucks/utilities and cases involving overloaded vehicles (Brice 2000). This criticism was illustrated by a review of South Australian indigenous road crash hospitalisations. Of the 551 cases, Tiong (1997) reported that 22% of hospitalisations had unspecified 'user types' and 36% could not be identified by 'crash type' (for example, loss of control, roll-over, collision with pedestrian, etc.).

3.2 Indigenous road trauma: Overview of the problem

Among indigenous Australians land transport was the second most frequent cause of death in the period 1997 to 2000 (after Intentional self-harm) during which 324 Aboriginal and Torres Strait Islander persons were recorded as dying due to this cause (Helps and Harrison, 2004). The profile of road trauma among indigenous populations differs vastly from mainstream road crash trends (Cercarelli 1999; Cercarelli et al. 2000; Garrow 1997; Harrison et al. 2001). This section highlights the increased crash risk faced by the indigenous population. It also profiles the characteristics of crashes involving indigenous people.

3.2.1 Comparative crash risk of indigenous Australians

Data limitations aside, there is a large body of evidence to suggest that the road fatality rate of the indigenous population is about three times higher than that of the non-indigenous population (ATSB 2004; Brice 2000; Cercarelli 1997; Harrison et al. 2001; Moller 1996; Moller et al. 1996).

Using available indigenous road fatality data (from Western Australia, South Australia and the Northern Territory) and ABS estimates of indigenous populations for all States and Territories, McFadden, McKie and Mwesigye (2000) estimated the comparative indigenous road toll Australia-wide. Two estimation methods were employed, a simple pro-rata method and a (preferred) method which took into account potential differences in fatality rates between States and Territories. While acknowledging that inconsistency in the definition and identification of indigenous Australians is almost certain to have resulted in underestimations of true mortality rates McFadden et al. reported that:

'Using the second method it is estimated that in 1997 there were 31 indigenous deaths per 100,000 population. This is three times the estimate for the non-indigenous population (10 deaths per 100,000 population). The simple pro-rata method results in a slightly higher estimate of indigenous deaths (35 deaths per 100,000 population)' (McFadden et al. 2000 p1).

A further examination of road crash data from the three abovementioned jurisdictions for the period 1994-1997 revealed that road crashes accounted for just under two percent of all deaths, but over five per cent of indigenous deaths.

Cercarelli (1997) used the Western Australian Road Injury Database (WARID), the only database which links crash details from police incident reports with injury and casualty details contained in hospital and Coronial records, to examine patterns of crash involvement by indigenous people. Cercarelli (1997) examined Western Australian road crash data collected between 1988 and 1994 and found that indigenous people are highly over-represented in hospitalisation rates in rural and remote areas, especially as a result of single-vehicle and pedestrian crashes. During the study period, approximately one in every 3,000 non-indigenous road users was hospitalised, compared with about one in every 1,000 indigenous road users. In a later study, Cercarelli (1999) used crash data gathered between 1988 and 1996 to show that:

- The fatality rate for indigenous Western Australians (at 34.7 per 100,000 population) was 2.5 times higher than that for non-indigenous Western Australians.
- The hospitalisation rate for indigenous Western Australians was 679.8 per 100,000 population, almost three times higher than for non-indigenous Western Australians.
- indigenous people accounted for seven per cent of road injury-related hospital separations between 1988 and 1996, but only represented three per cent of the population during that time.

3.2.2 High-risk modes of transport

The two most common types of crashes involving indigenous people are single-vehicle crashes (where many of the casualties are passengers) on remote roads, and crashes involving pedestrians, both within and outside of towns (Cercarelli 1994; Cercarelli 1997; Cercarelli 1999; Harrison et al. 2001).

Cercarelli (1999) reported that most fatal injuries among indigenous Western Australians were sustained during 'hit pedestrian' crashes (25%) and 'non-collisions' (33%). More recently, Legge, Gavin and Cercarelli (2004) provided a comparison of indigenous and non-indigenous road transport injury hospitalisations for Western Australia in 2001. Indigenous Australians who were injured, were more likely to have been injured as pedestrians and passengers compared to non-indigenous Australians. Indigenous Australians who were injured in a transport accident were less likely than non-indigenous Australians to have been injured as drivers, motorcyclists or bicyclists (see Table 2).

Table 2: Comparison of indigenous and non-indigenous road transport hospitalisations, for Western Australia 2001 (source: Legge et al. 2004)

Road User Group	indigenous Status					
	Non-Aboriginal		Aboriginal		Total	
	n	%	n	%	n	%
Driver	754	26.9	32	14.3	786	25.9
Passenger	460	16.4	66	29.6	526	17.4
Motorcyclist	458	16.3	6	2.7	464	15.3
Bicyclist	710	25.3	39	17.5	749	24.7
Pedestrian	210	7.5	51	22.9	261	8.6
Other or unknown	215	7.7	29	13.0	244	8.1
Total	2,807	100.0	223	100.0	3,030	100.0

3.2.3 Behavioural risk factors

In an attempt to identify the causal factors underpinning the over-involvement of indigenous people in road trauma, Brice (2000) examined Coronial records in South Australia in the 1990s. Brice (2000) reported that:

'... alcohol intoxication together with night-time occurrence (in the case of pedestrian deaths), and alcohol intoxication of drivers

together with the lack of use of seat restraints (in the case of other crash fatalities), accounted for the majority of deaths ... Indeed, the results of this investigation were startling as over 60% of non-pedestrian fatalities resulted from 'no restraint – deceased ejected' type crashes – some at low speed' (p. vi).

Williams and Maisey (1991) conducted statistical and spatial examinations of indigenous and non-indigenous road crashes in Western Australia through the 1980s. During this time, 177 indigenous Australians were killed in road crashes in Western Australia, a rate of 47 deaths per 10,000 people per annum. The non-indigenous fatality rate was 16 deaths per 10,000 people per annum. Williams and Maisey identified the major risk factors as:

- non-compliance with road laws, such as drink driving
- non-wearing of seatbelts or restraints
- overcrowding and illegal seating positions in vehicles
- road quality and inappropriate speed, especially in rural areas
- carelessness with regard to general road safety practices, especially by intoxicated pedestrians.

It has been over a decade since the work of Williams and Maisey (1991) was published but several presentations at the 2004 indigenous Road Safety Forum highlighted the factors listed above as major problems or priorities for intervention (eg. Carter 2004; Gordon 2004; Heimberger 2004). The issue of unlicensed driving among indigenous populations was also highlighted during the recent forum (Heimberger 2004; Walsh 2004). The significance of these behavioural factors as contributors to indigenous road trauma, combined with vehicular characteristics and the rural environment, are discussed below.

Alcohol

There is a large body of Australian data (Alati, Peterson & Rice 2000; Brice 2000; Brownlow 1998; Harrison et al. 2001) demonstrating a strong link between alcohol consumption and indigenous road trauma. Rae (1995), for example, noted that alcohol plays a significant role in many indigenous fatalities, underpinning a large proportion of single-vehicle rollover incidents and pedestrian fatalities in the Northern Territory. The ATSB (2004) reports on Northern Territory crash data which suggests that alcohol intoxication was recorded as a causal factor in over 45% of indigenous fatalities recorded between 1996 and 1999. The Northern Territory data also revealed that over 60% of indigenous driver/rider fatalities were over the legal BAC limit for a vehicle controller (0.05 g/100ml).

Pedestrians that are struck by a vehicle often have a high blood alcohol concentration (BAC). Investigations of Western Australian indigenous road fatalities (Cercarelli 1994; Williams & Maisey 1991) have revealed that the majority of indigenous pedestrians killed were intoxicated, with two-thirds having a BAC of 0.15% to 0.29%. A further 20% registered a BAC in excess of 0.30%. Similarly, the ATSB (2004) reports on Northern Territory coronial data which revealed that over 85% of indigenous pedestrian fatalities that occurred between 1996 and 1999 had a BAC over 0.05 g/100ml, while 80% had a BAC over 0.15 g/100ml. Thirteen of the 32 Aboriginal pedestrians who were killed between 1987 and 1991 in the Northern Territory while intoxicated with alcohol were asleep upon a roadway when struck (Rae 1995).

Overloading and non-compliance with seatbelt/restraint legislation

The over representation of indigenous Australians among passenger casualties reflects issues such as overcrowding of vehicles and non-compliance with seatbelt/restraint regulations, including riding in the open load-space of vehicles (Road Safety Council of Western Australia 2000). The ATSB's (2004) analysis of coronial data indicated that almost 70% of indigenous car

occupants or motorcycle riders killed between 1996 and 1999 were not wearing a seatbelt or helmet, respectively. Kirov et al. (2000) and Tiong (1997) reported that indigenous children are more than twice as likely to be involved in a serious casualty crash than other children and, more often than not, the injury is the result of not wearing a seatbelt or restraint. The South Australian experience has been similar, with 16 of the 27 (59%) of the fatal crashes involving indigenous Australians that occurred between 1990 and 1998 having resulted in the death of at least one person who was unrestrained and ejected from the vehicle (Brice 2000).

The Northern Territory Department of Infrastructure Planning and Environment (2004) reports that in the three years prior to the 1994 Northern Territory ban on riding in open load spaces without an approved roll cage, 16 rear tray passengers were killed in the jurisdiction, and 134 were injured. Thirteen (81%) of those killed and 99 (74%) of those injured were indigenous. During the four years that followed the ban five rear tray passengers were killed and 49 were injured, of which respectively 3 and 36 were indigenous.

Garrow (1997) pointed out that passengers riding in the open load-space of utility trucks comprised 18% of fatalities in road crashes in the remote north (Kimberley region) of Western Australia. *'Aboriginal people comprised 86.7% of the Kimberly OLS [Open load space] fatalities and 64% of the total motor vehicle crash fatalities in the Kimberley from 1990-97 for whom race was known'* (Garrow 1999 p.341). The reduction of open load-space passenger fatalities and injuries has since become a road safety priority for Western Australia (see Section 7.7), however limitations with the state crash database have made it difficult to draw a sound comparison of the relative risks facing indigenous people in this context.

Unlicensed driving

Unlicensed driving is often associated with a lack of knowledge and training in road rules and safe driving. The limited data available on the involvement of indigenous persons in motor vehicle offences suggests that indigenous people are over represented in driving offences, particularly unlicensed driving. The ATSB (2003) reports on Northern Territory Coronial data which indicates that almost 70% of the indigenous vehicle occupants or motorcyclists killed in the state between 1996 and 1999 were either unlicensed or in a vehicle driven by an unlicensed person. Buxton et al. (2000) reported that 53% of the 1038 'driving offence' receptions into Western Australian prisons in 1999 were indigenous persons, and the two most common offences were drink driving and unlicensed driving. Even with a smaller base population, 54 (11%) of the 453 people in New South Wales prisons in 1997 for traffic related offences were indigenous and, once again, drink driving and unlicensed driving figured predominantly (New South Wales Bureau of Crime Statistics 1999).

Joyriding

Following a two-year qualitative research study in Queensland, Dawes (2000) identified car theft in order to joyride (stealing cars for short-term transport or for non-utilitarian purposes) as a major problem among young people, particularly those from low socio-economic backgrounds, such as indigenous and rural youth with limited access to public transport. This research provided recommendations and intervention strategies to reduce joyriding by addressing issues of marginalisation and exclusion from public places.

3.2.4 Environmental and post-crash risk factors

According to Cercarelli et al. (2000), approximately 70% of indigenous Australians live in non-metropolitan areas and are therefore exposed to numerous cultural and environmental risk factors specific to rural and remote Australia. These include increased exposure to crash risk through greater distances travelled, higher speed limits, poorer road quality, increased diversity in vehicle types and delays in retrieval and accessing medical treatment and rehabilitation

(AIHW 1998; Armour & Cinquegrana 1990; Cercarelli 1994; Harrison et al. 2001; Hasson 1999; Honor 1995; Moller 1995; Pettitt et al. 1994; Ryan et al. 1988; Ryan et al. 1992).

Retrieval and trauma management problems are often associated with crashes that occur in rural and remote areas (OECD 1999). The delayed crash notification period (Brodsky 1990; Stewart 1990) is further exacerbated by slower emergency response and retrieval times (Brodsky 1990; Evanco 1999; National Road Trauma Advisory Council 1993). Indeed, ambulance attendance times have been shown to differ considerably for indigenous and non-indigenous road fatalities. While just under 40% of indigenous road fatalities that occurred in the Northern Territory between 1996 and 1999 were attended within 30 minutes, a similar proportion were not attended by an ambulance at all. In contrast, just over 60% of non-indigenous fatalities were attended within 30 minutes and less than five per cent were not attended by an ambulance (ATSB 2004).

It is also the case that the effect of health care and rehabilitation on the subsequent recovery of indigenous people injured in road crashes remains unclear because hospital staff are not always the primary caregivers. In many cases road trauma injuries are treated at remote indigenous clinics and/or community controlled health services, only some of which have their own resident doctors. Brice (2000) suggests that in South Australia only critical cases would be evacuated to a major hospital (see Nganampa Health Council 1997).

Harrison et al. (2001) argued that more accurate information on the extent of indigenous road injuries and their characteristics, as well as rehabilitation outcomes, could be obtained by examining local and regional data sources. These sources are generally not published and include intervention program records, local hospital records (as opposed to state records), clinic records and special one-off studies and collections.

There is a growing body of evidence to suggest that indigenous people in rural areas are reluctant to utilise organised health care services even when they are available. Some of the endemic barriers to utilising health care services in rural areas include cost, lack of insurance coverage, travel distance, transportation problems, difficulty in taking time off work, traditional rural values (such as self-reliance), reduced referrals and a lack of knowledge about the potential benefits of specialised medical care (Casey et al. 2001; Schur & Franco 1999; Strickland & Strickland 1996). In addition, there are a number of historical and cultural factors influencing the beliefs and perceptions about health and injury treatment held by indigenous persons (ATSIWG 2002). Harrison et al. (2001 p.71) identified '*rehabilitation and long term effects of injury*' and '*future patterns of health burden*' as priority areas when examining indigenous road trauma.

3.2.5 Vehicular risk factors

The exact contribution of vehicle characteristics to the incidence and severity of indigenous road crashes remains unclear. However, there is evidence to suggest that vehicle choice and defects are a major contributor to rural and remote road trauma in general (Hasson 1999; Pettitt et al. 1994; Ryan et al. 1998). Northern Territory Coronial data suggests that a vehicle malfunction was a major causal factor in just under 10%, and at least partially responsible for just over 20%, of indigenous road fatalities that occurred between 1996 and 1999. In contrast, vehicle malfunction was reported to be at least partially responsible for less than five per cent of non-indigenous road fatalities (ATSB 2004).

As previously mentioned, a substantial proportion of the indigenous population reside in rural and remote areas and therefore rely more than most Australians on motorised transport. Despite having to travel greater distances on poorer roads than their city counterparts, lower incomes dictate that rural residents usually have older vehicles (Elkington 1999a; 1999b).

Lower vehicle ownership rates are also likely to contribute to the incidence of indigenous road accident casualties. Based on 1996 Census data, Radford et al. (1999) indicated that

indigenous people average one vehicle per household compared with 1.4 per non-indigenous household. It is also true that dwellings occupied by indigenous people are likely to have a larger number of residents than those occupied by non-indigenous Australians (ABS 1996). So, faced with the task of travelling long distances to meet daily needs, indigenous persons often overstep carriage recommendations and drive older (often unroadworthy) vehicles. As a result, indigenous Australians are typically injured as passengers, often overloaded in inappropriate vehicles for the situation (Ryan et al. 1998).

The poor condition of many roads in remote areas may damage vehicles (Cercarelli et al. 2000). Chew et al. (1998) reports that vehicles driven in rural areas are often improperly maintained. Low levels of vehicle maintenance by rural indigenous drivers are likely to reflect the socio-economic circumstances of the vehicle owner/driver, and possibly a lack of knowledge and access to skilled help.

4 Crash data analysis

As discussed in Section 3.1 of this report, there is considerable inconsistency in indigenous casualty data, largely due to difficulties in defining and identifying 'indigenous' status. The ABS data are based on the national registry of deaths. The literature review warned of the fluctuations in Census data with regard to the indigenous population, and that the ABS data should be viewed critically. In the Queensland database, indigenous status is based on racial appearance, which is fraught with reliability and consistency issues.

4.1 Australia-wide fatality data

This section details a crash analysis of Australia-wide indigenous road fatalities data provided by the Australian Bureau of Statistics for the period from 1997 to 2000 inclusive. Figure 1 shows the yearly trend in indigenous road fatalities from 1997 to 2000. Yearly fatalities were between 59 and 68, except for 1998 when they totalled 92.

Figure 2 shows indigenous road fatalities by state, with Western Australia and Northern Territory having the most indigenous road fatalities. It is interesting to note the indigenous population for each state (shown on the graph in parentheses), with New South Wales and Queensland having the highest proportions of the total indigenous population (28.4% and 27.7% respectively), followed by Western Australia and the Northern Territory (14.4% and 13.2% respectively) (Source: ABS 1998: Estimated indigenous population, Australia, by jurisdiction, 30 June 2002).

Statistics for indigenous fatality crashes in urban and rural areas were not available from the ABS. Nonetheless, a comparison could be made for indigenous casualty crashes in urban/rural localities in the Northern Territory (see Figure 19). In addition, a comparison of indigenous casualty crashes in Queensland by speed limit gives an indication of the proportion of crashes that were likely to have been in urban and rural areas (see Figure 13).

Figure 1: Indigenous road fatalities by year: Australia-wide, 1997-2000

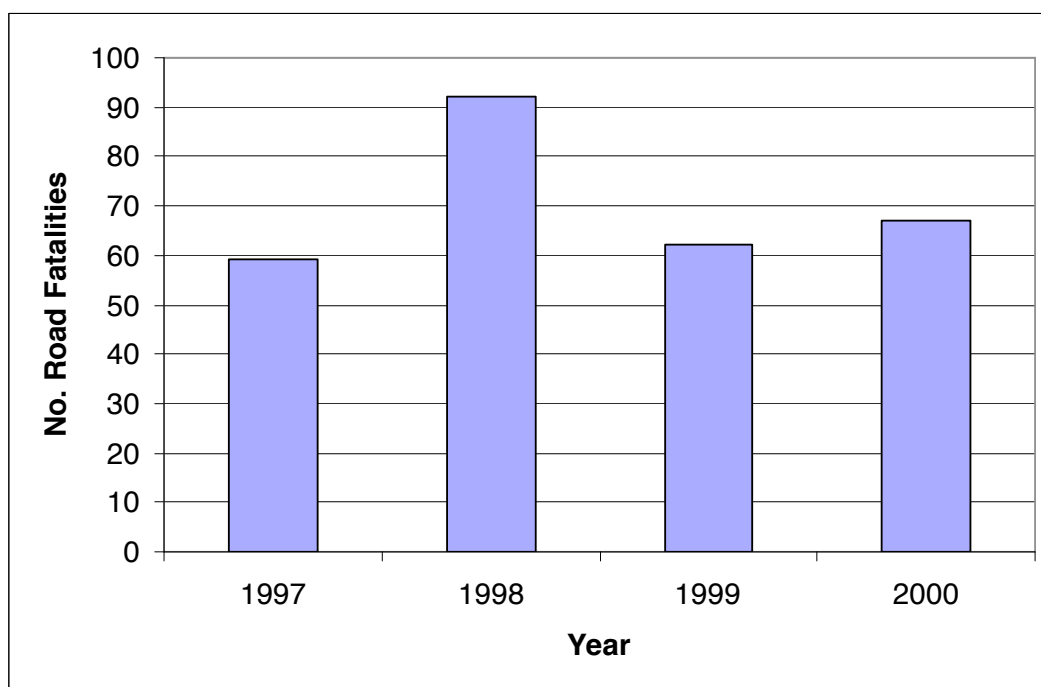


Figure 2: Indigenous road fatalities by state: 1997-2000

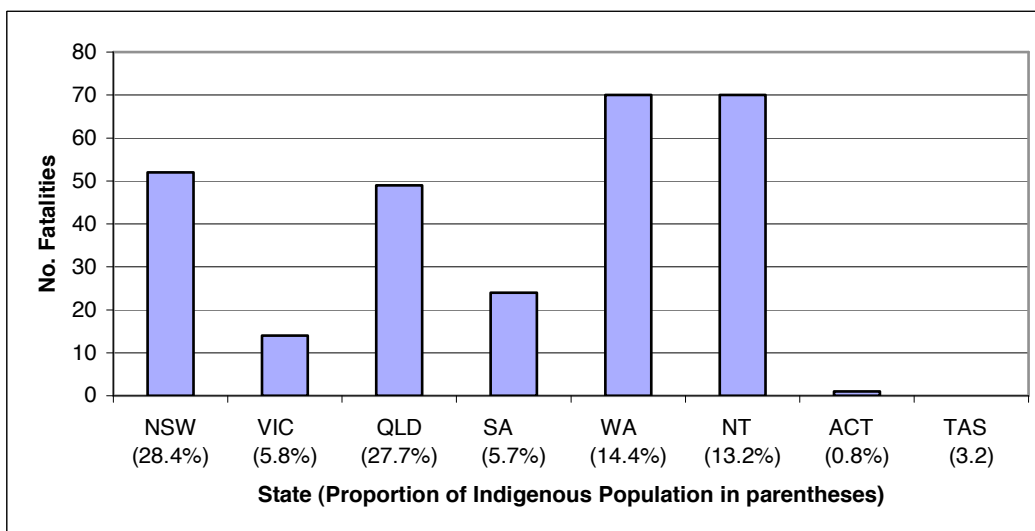


Figure 3 shows Australian indigenous road fatalities by month, with peaks evident around May and October.

Figure 3: Indigenous road fatalities by month: Australia-wide, 1997-2000

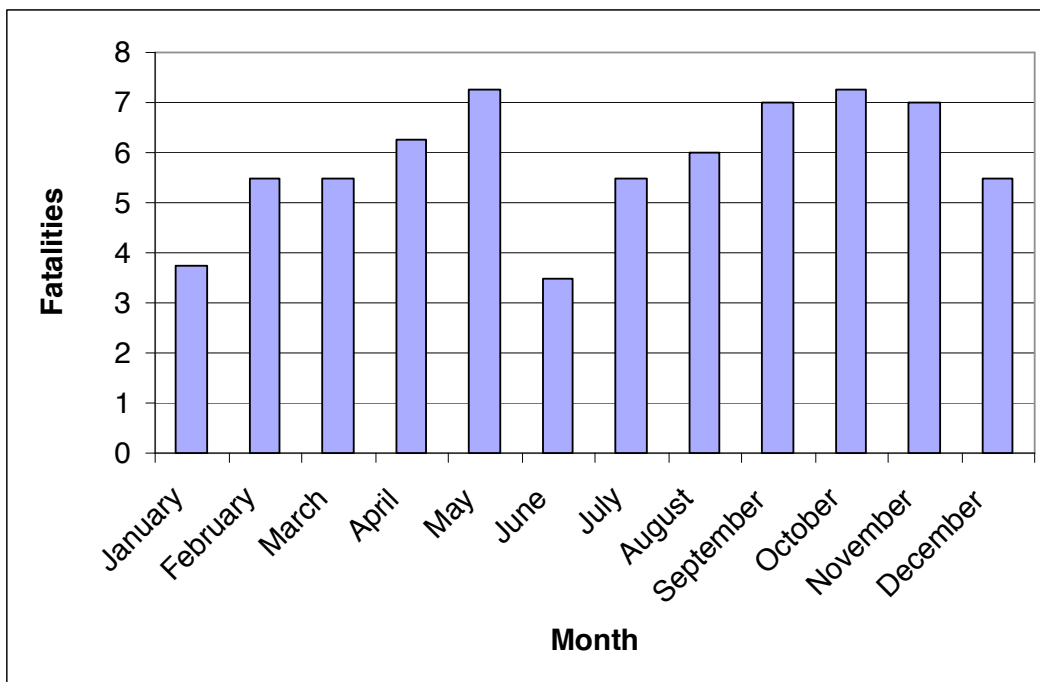


Figure 4 shows indigenous road fatalities by user type. Car occupants and pick-up occupants comprise over half of the recorded road fatalities (57%), with pedestrians also making up a large proportion (40%). Figure 5 shows a comparison of all Australian fatalities and indigenous fatalities by road user type. While indigenous road fatalities make up some four per cent of all

Australian road fatalities, indigenous pedestrian fatalities make up approximately nine per cent of all Australian pedestrian fatalities.

Figure 4: Indigenous road fatalities by road user group: Australia-wide, 1997-2000

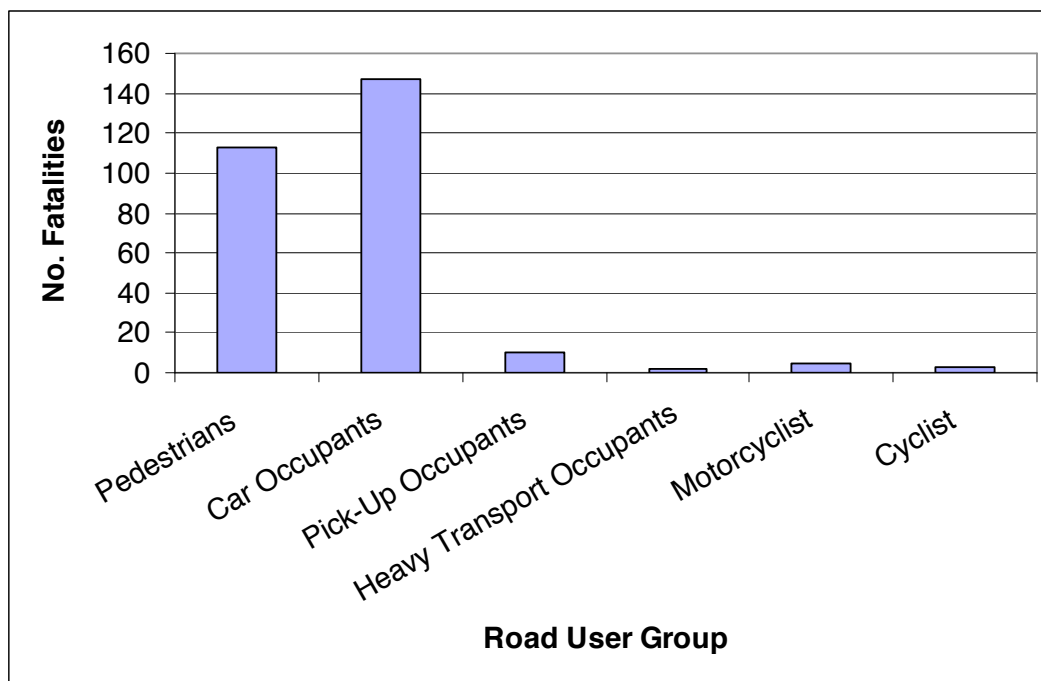


Figure 5: All Australian road fatalities and indigenous fatalities by road user group: Australia-wide, 1997-2000

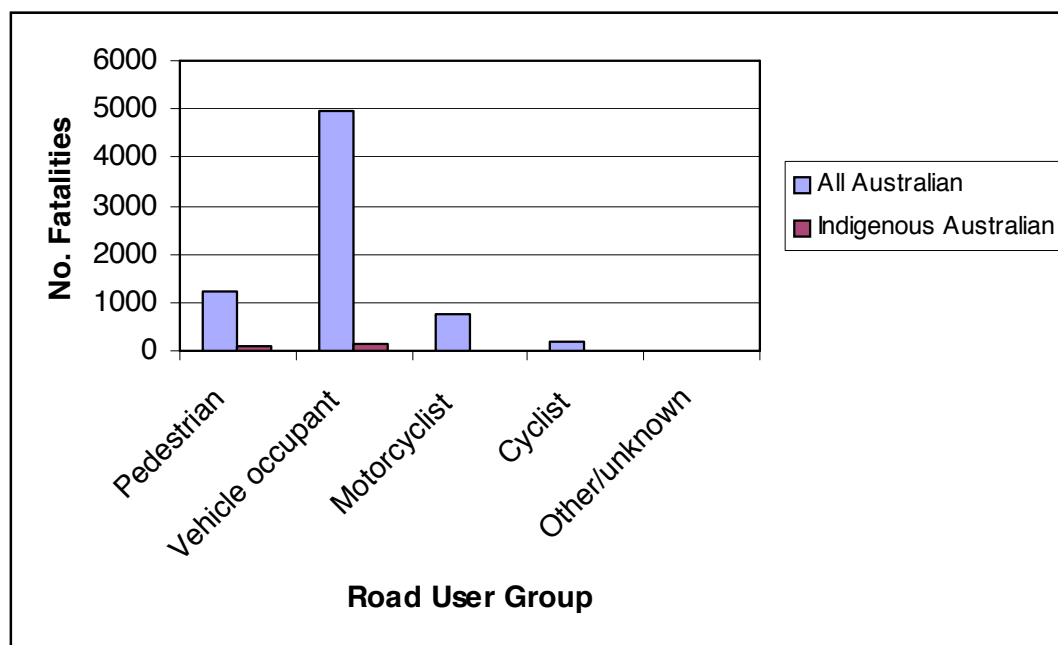


Figure 6 shows indigenous road fatalities by age and sex, for the period from 1997 to 2000. Males are predominant with the 15-24 years age group particularly over-represented, followed by the 25-39 years age group. Of the female fatalities, the 35-39, 20-24, and 0-4 years age groups are most represented. For comparison, Figure 7 shows all Australian road fatalities by age and sex, for the period from 1997 to 2000. Males are predominant with the 15-29 years age group particularly over-represented, followed by the 30-39 years age group, which is similar to indigenous male fatalities. Of the female fatalities, the 15-24 years age group, followed by the 25-39 and 70-79 years age groups are most represented.

Figure 6: Indigenous road fatalities by age and sex: Australia-wide, 1997-2000

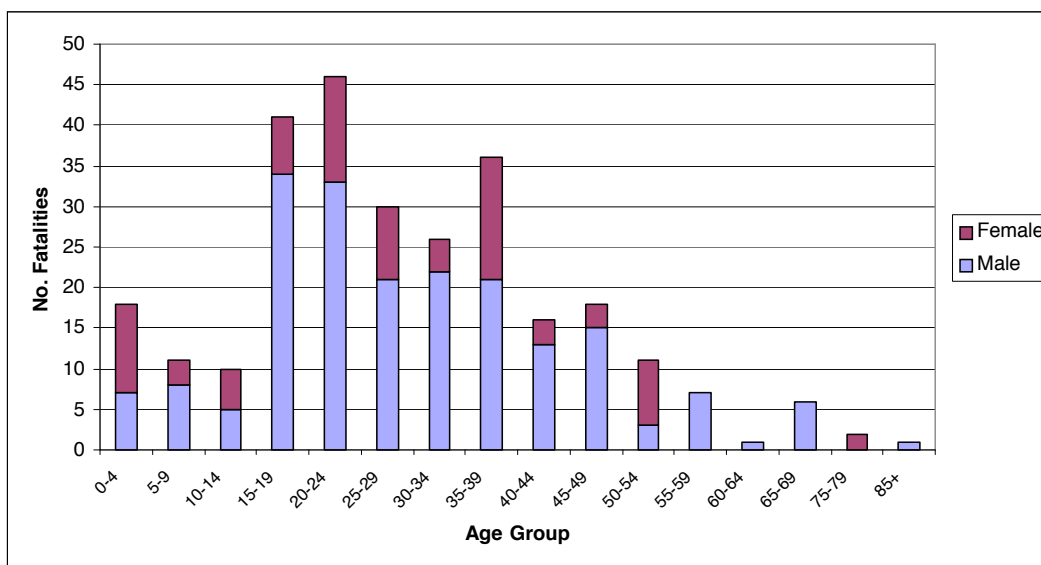


Figure 7: All Australian road fatalities by age and sex: Australia-wide, 1997-2000

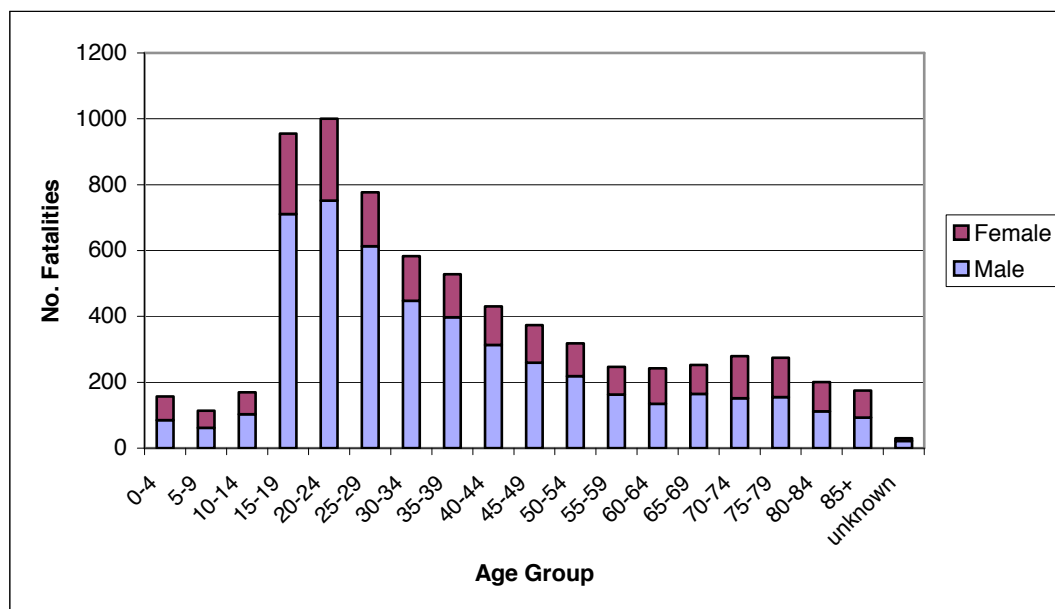


Figure 8 and Figure 9 show indigenous car occupant and pedestrian fatalities respectively, by age and sex. Males are predominant in both, although less so in pedestrian fatalities. Figure 8 shows that the greatest number of occupant fatalities is in the 15-24 years age group. Figure 9 shows that the greatest number of pedestrian fatalities is in the 35-39 years age group, many also occurring in the 0-4 and 15-34 years age groups.

Figure 8: Indigenous car occupant fatalities by age and sex: Australia-wide, 1997-2000

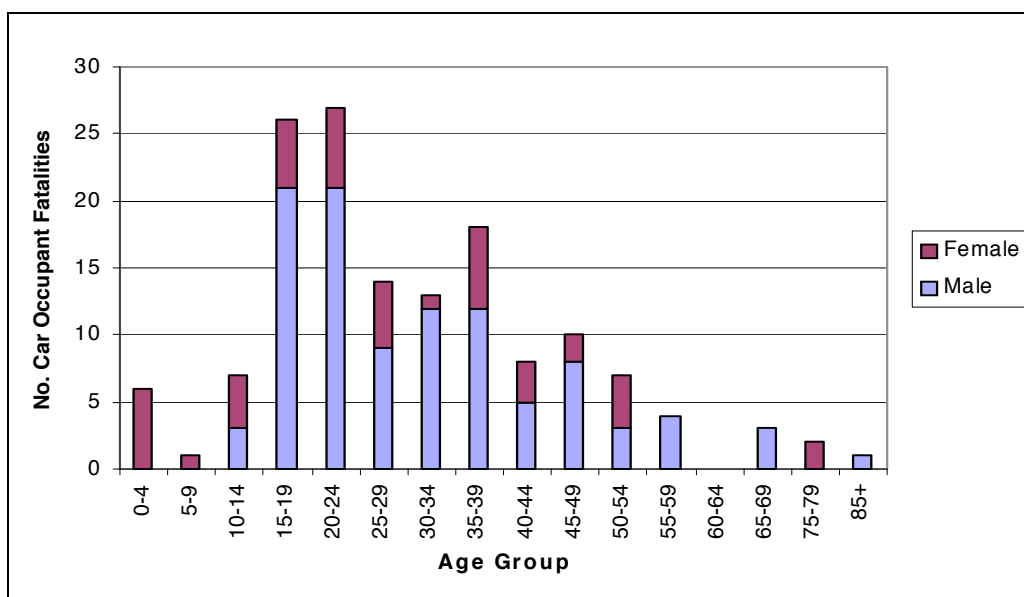
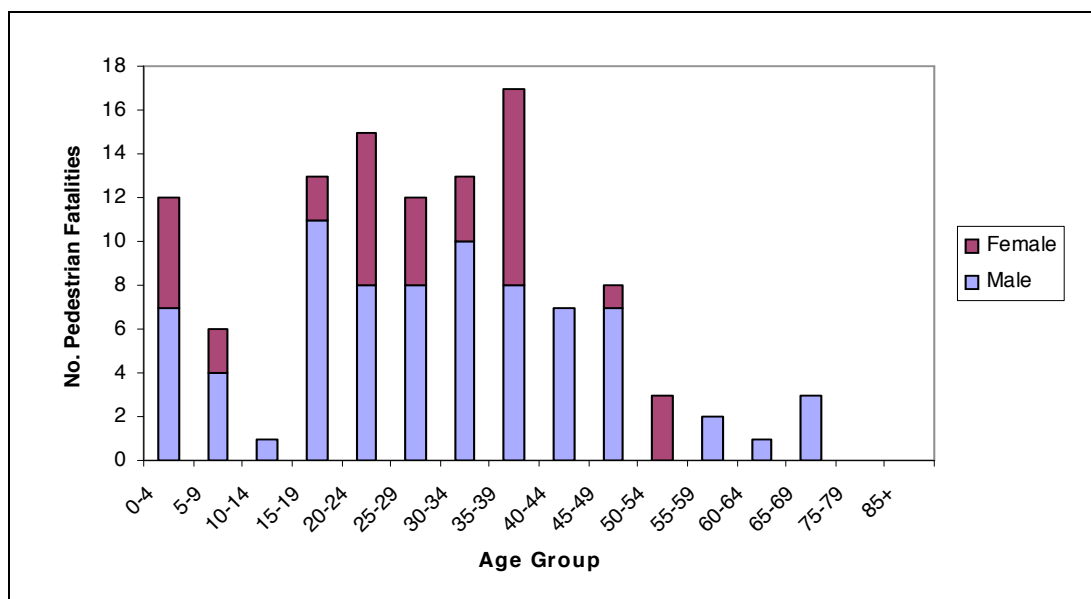


Figure 9: Indigenous pedestrian fatalities by age and sex: Australia-wide, 1997-2000



4.2 Queensland data

This section details an analysis of the Queensland indigenous road casualty data provided by the Land Transport and Safety Division of Queensland Transport for the period from 2000 to 2001 inclusive. This data and analysis are essentially unchanged from that presented in the 2003 scoping report.

Figure 10 shows the number of indigenous road casualty crashes for 2000 and 2001. The number of crashes involving minor injury, medical treatment and hospitalisation was greater in 2001, although the number of crashes involving fatalities decreased from six in 2000 to four in 2001. As discussed earlier, there are issues with identifying and defining 'indigenous status' when recording road crashes, which may have resulted in an under-reporting of indigenous crashes, particularly in 2000 when reporting of indigenous status had only been recently introduced. It should also be noted that two years of crash data are highly insufficient for identifying trends over time, and Figure 10 should not be interpreted as showing any such trend.

Figure 10: Indigenous casualty crashes by year and severity: Queensland, 2000-2001

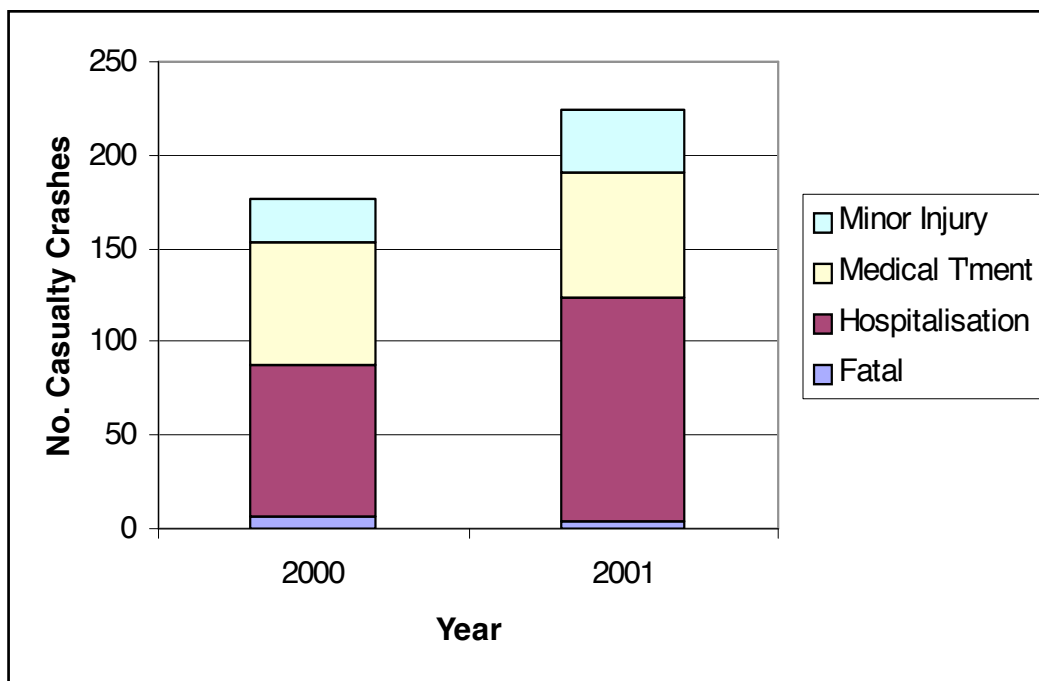


Figure 11 shows indigenous road casualty crashes for 2000 and 2001 by month, with a peak evident in August, and a low in January. This is not dissimilar to the ABS data for all jurisdictions.

Figure 12 shows indigenous road casualty crashes by time of day for the period from 2000 to 2001. It can be seen that the peak period for indigenous casualty crashes was between 4pm and 6pm, with a low between 12 midnight and 2am.

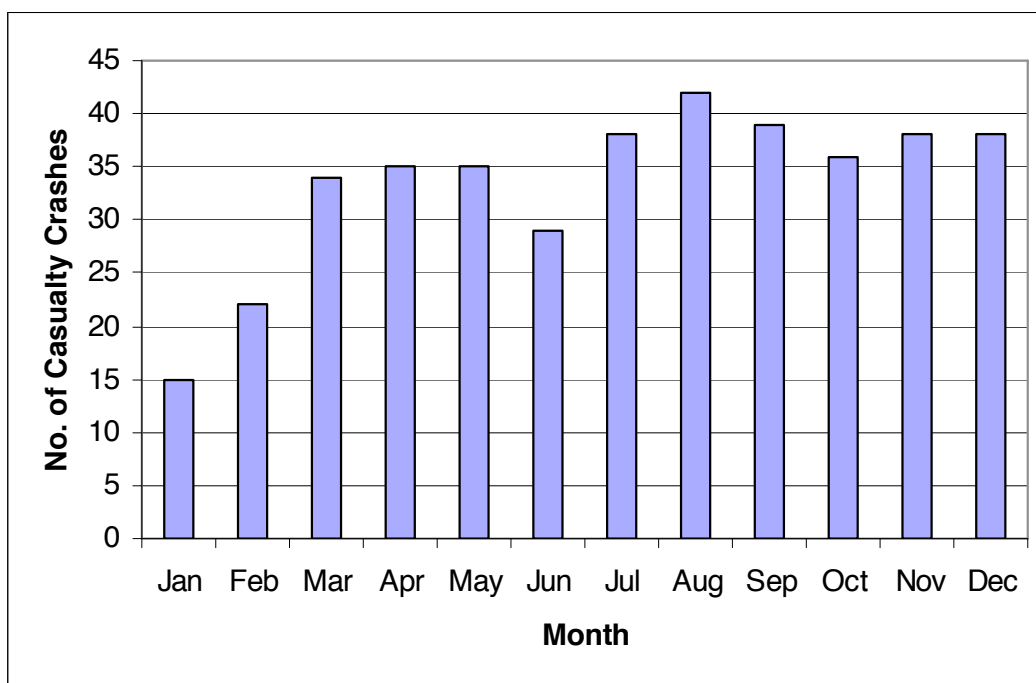
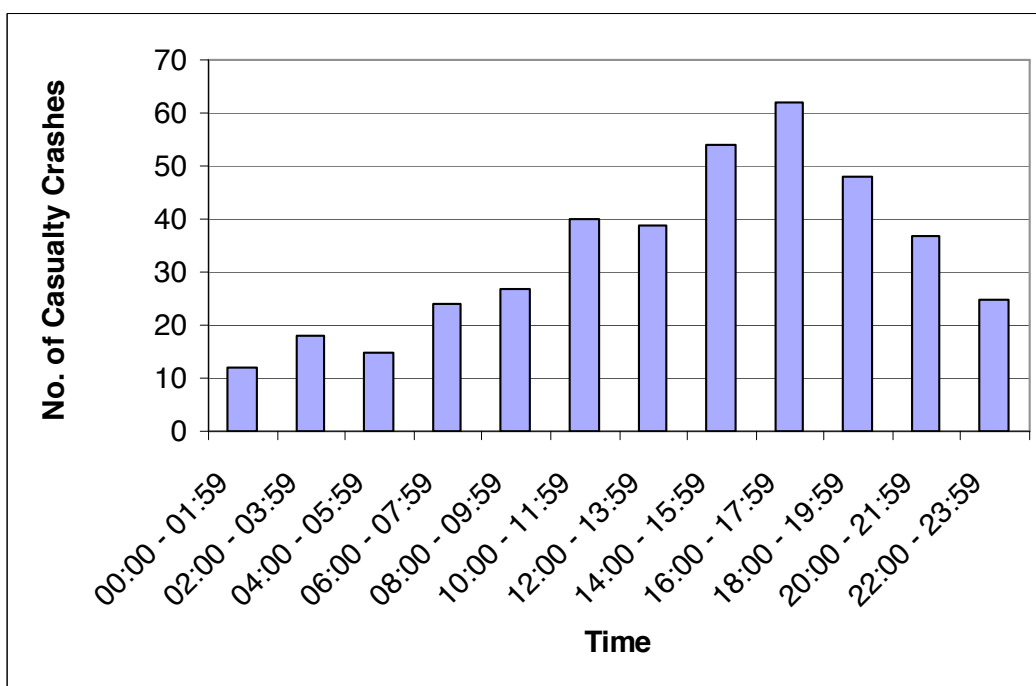
Figure 11: Indigenous Casualty Crashes by Month: Queensland, 2000-2001**Figure 12: Indigenous casualty crashes by time of day: Queensland, 2000-2001**

Figure 13 illustrates the number of indigenous casualty crashes that occurred in Queensland between 2000 and 2001, according to the speed limit of the road on which they occurred. Around half (54%) of all crashes occurred on roads with a limit of 60km/h (typically these would be urban roads) and over one-quarter (29%) occurred on roads with a 100km/h limit (typically these would be rural roads).

Figure 13: Indigenous casualty crashes by speed limit: Queensland, 2000-2001

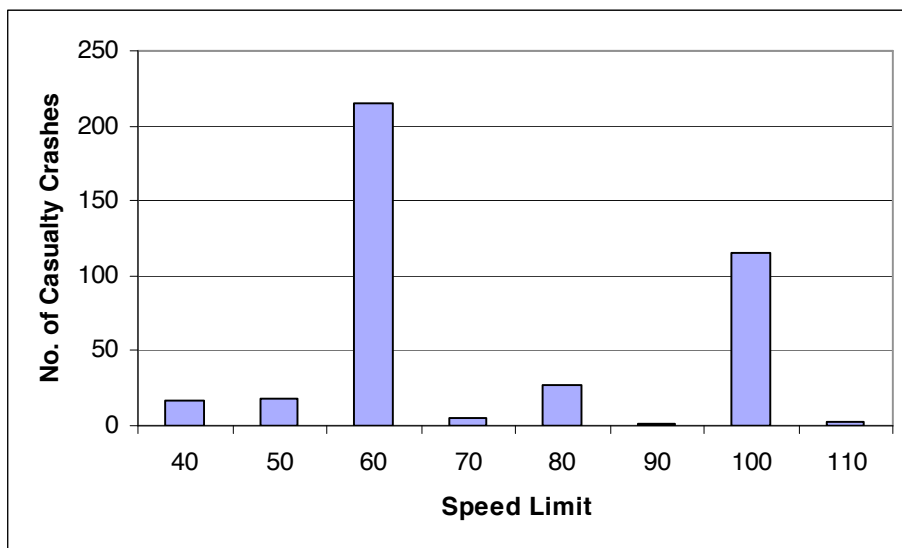


Figure 14 shows indigenous casualty crashes in Queensland according to their Definitions for Classifying Accidents (DCA) grouping. It can be seen that a high proportion of the casualty crashes were single-vehicle (off path) crashes (40%) and pedestrian crashes (23%).

Figure 14: Indigenous casualty crashes by DCA: Queensland, 2000-2001

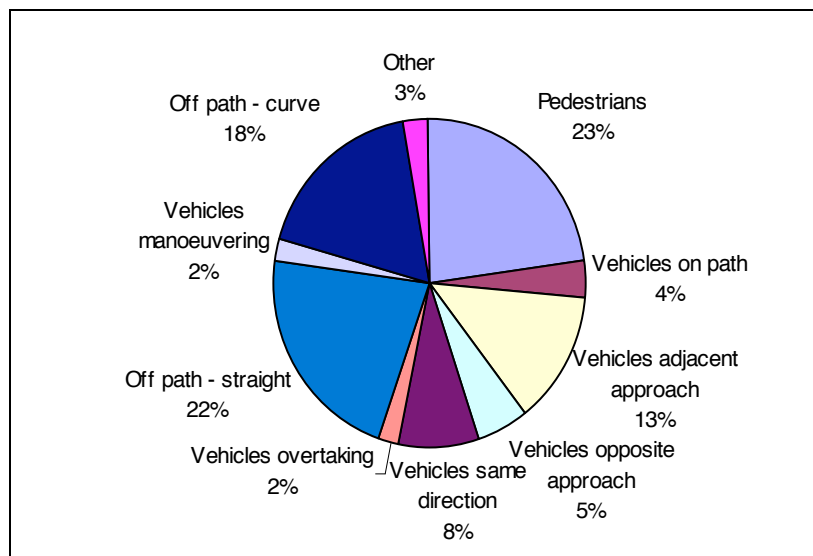
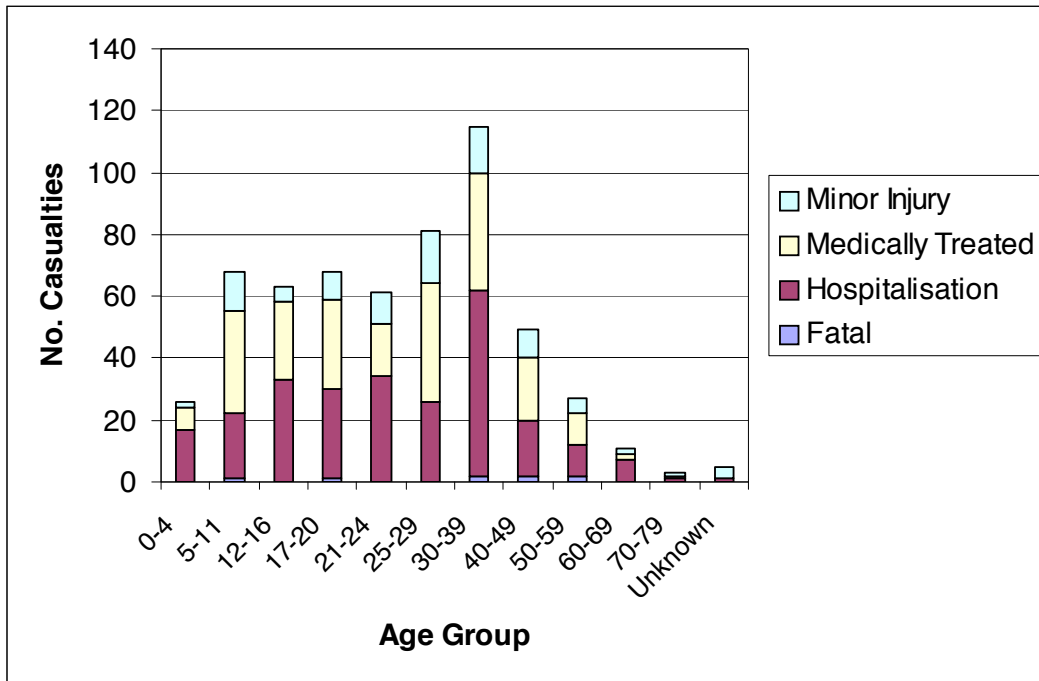


Figure 15 shows indigenous road casualties in Queensland by age and severity, for the period from 2000 to 2001. It is evident that people in the 30-39 age group make up a large proportion of such casualties.

Figure 15: Indigenous casualties by age group and severity: Queensland, 2000-2001



4.3 Northern Territory data

This section details an analysis of Northern Territory indigenous road casualty data provided by the Northern Territory Government for the period from 1996 to 2001 inclusive. Figure 16 shows the yearly trend in indigenous road casualty crashes between 1996 and 2001. The number of casualty crashes involving indigenous people was generally between 160 and 180, peaking at 193 in 1999 and decreasing in both 2000 and 2001.

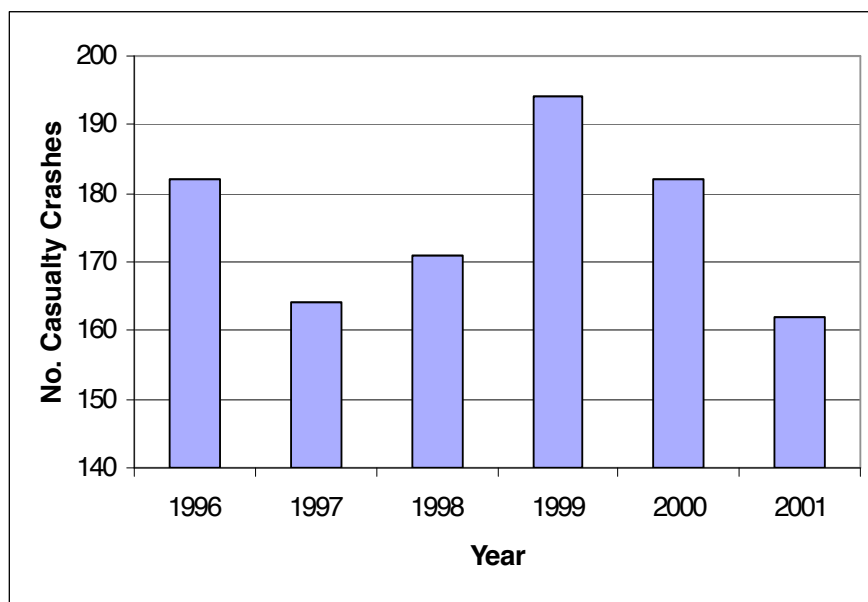
Figure 16: Indigenous casualty crashes by year: Northern Territory 1996-2001

Figure 17 shows indigenous casualty crashes for the period from 1996 to 2001 by month. The number of casualty crashes was fairly consistent over the months. Figure 18 shows the number of indigenous crashes by day of the week. The highest number of crashes occurred between Thursdays and Saturdays, with the lowest number occurring on Sundays. Figure 19 shows indigenous road casualty crashes by time of day. The peak period for casualty crashes was between 6pm and 8pm, with a low between 4am and 6am.

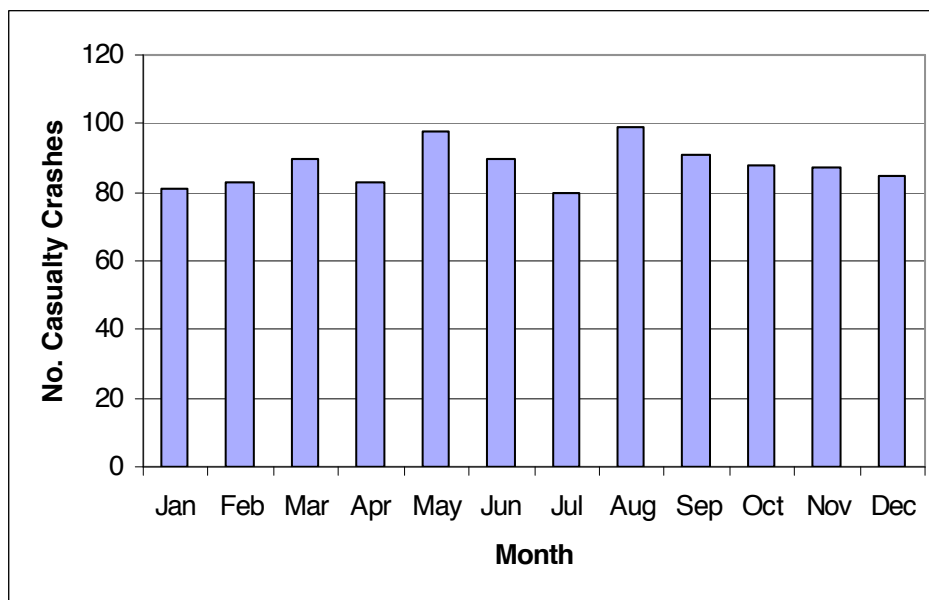
Figure 17: Indigenous casualty crashes by month: Northern Territory, 1996-2001

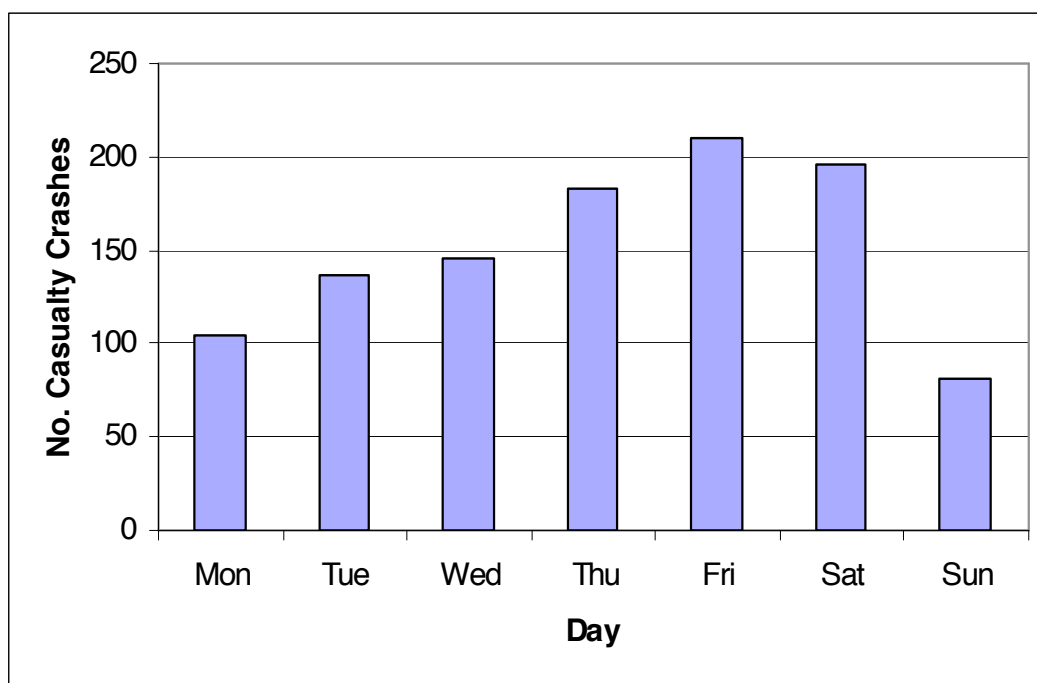
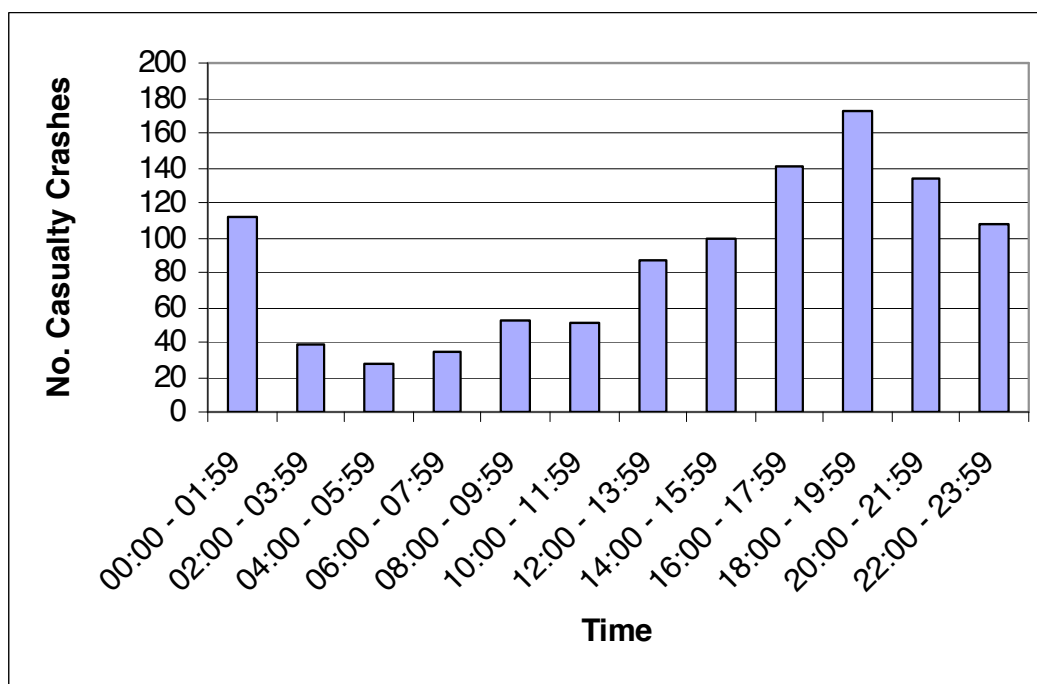
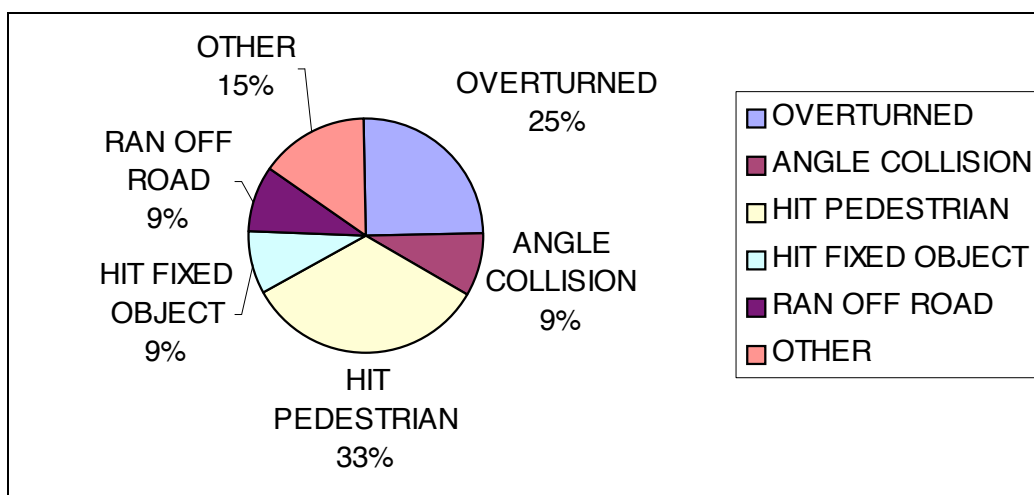
Figure 18: Indigenous casualty crashes by day of the week: Northern Territory, 1996-2001**Figure 19: Indigenous casualty crashes by time of day: Northern Territory, 1996-2001**

Figure 20 shows indigenous casualty crashes in the Northern Territory by crash type. It can be seen that a large number of crashes involved a pedestrian being hit (33%) or a vehicle overturning (25%). Other single vehicle crashes, 'ran off road' and 'hit fixed object', accounted for a further 18% of crashes.

Figure 20: Indigenous casualty crashes by type: Northern Territory 1996-2001



The number of casualty crashes involving indigenous people by location and severity is shown in Figure 21. There were only slightly more crashes in urban areas (51%) compared to rural areas (49%). However, of the fatal crashes, 67% were in rural areas and 33% were in urban areas. There were more crashes in each of the other categories of severity (treated admitted, treated not admitted, and injured not treated) in the urban areas.

Figure 21: Indigenous casualty crashes by location and severity: Northern Territory 1996-2001

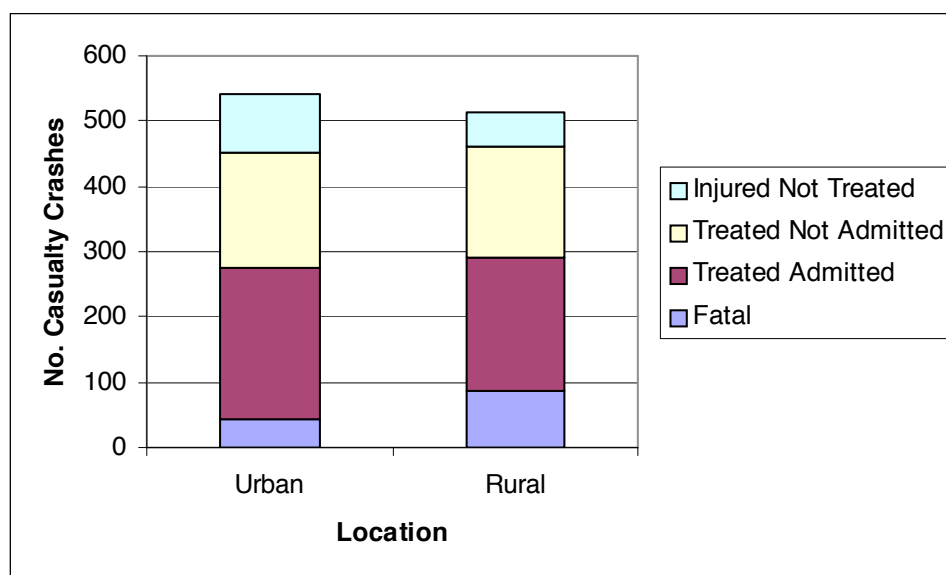


Figure 22 shows indigenous casualty crashes according to whether they were alcohol-related. Of the total number of crashes 36% were alcohol-related. However, of fatal crashes, 74% were alcohol-related.

Figure 22: Indigenous Casualty Crashes by Involvement of Alcohol: Northern Territory 1996-2001

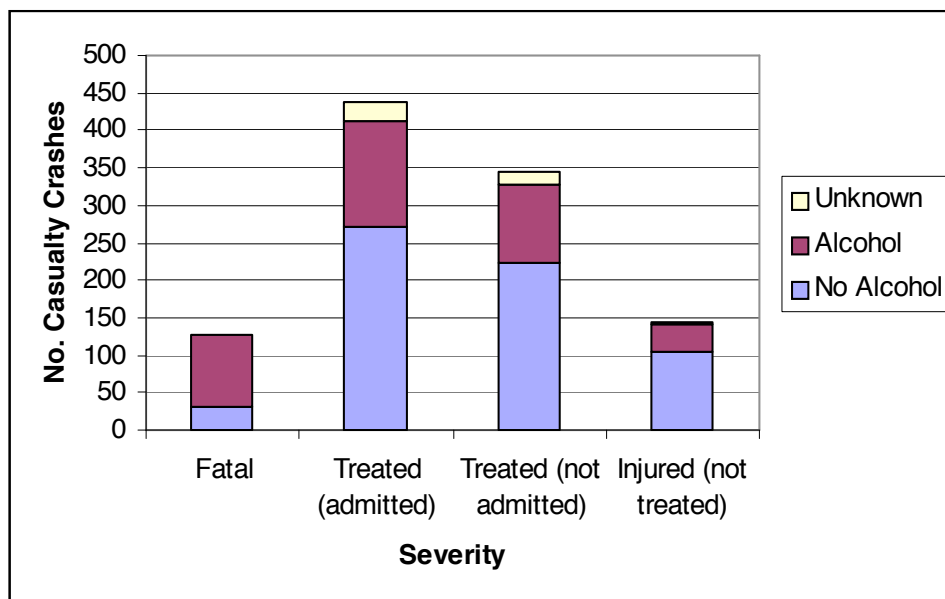


Figure 23 shows the number of casualties involved in indigenous casualty crashes, according to their sex and severity of injury. Males made up 70% of the total number of casualties.

Figure 23: Indigenous casualties by sex and severity: Northern Territory 1996-2001

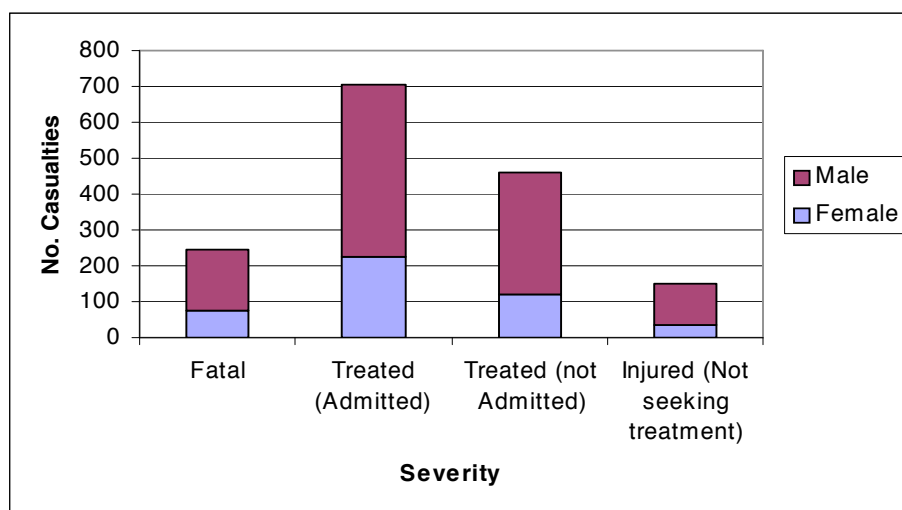


Figure 24 shows the number of indigenous casualties according to road user type. The highest number of casualties were drivers (34%), followed by passengers (28%) and pedestrians (23%). While only making up a small percentage of casualties (3%), there was a considerable number of injured passengers without a seat (51).

Figure 24: Indigenous casualties by road user type: Northern Territory 1996-2001

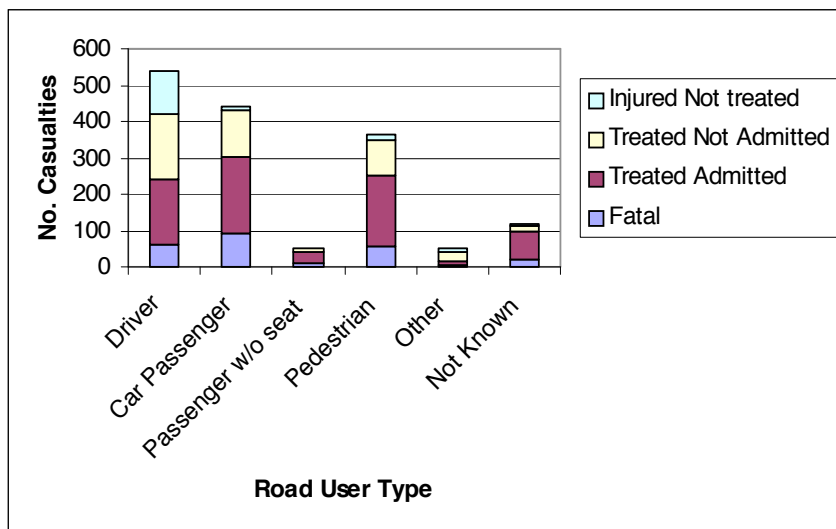


Figure 25 shows indigenous casualty numbers according to whether a restraint or helmet was worn. Among those casualties for whom it was recorded, the numbers wearing and not wearing a restraint were almost identical. However, of the total number of fatalities, 54% were not wearing a restraint compared to 8% wearing a restraint and restraint use was not recorded for the remainder.

Figure 25: Indigenous casualties by restraint wearing: Northern Territory 1996-2001



4.4 Western Australian data

Because Western Australian data were not available in a form that allowed ARRB to conduct analyses, most of the statistics presented in this section were drawn from Cercarelli's (1999) report on crash-related hospitalisations and deaths occurring in Western Australia between 1998 and 1996 inclusive. The University of Western Australia's Road Accident Prevention Research Unit provided the data presented in Cercarelli's report. The data from 1997 through to 1999 that are presented were drawn from a discussion paper drafted by the Aboriginal Road Users Taskforce, who based their statistics on data provided by the University of Western Australia's Injury Research Centre.

Figure 26 shows that the hospitalisation rate (per population) for indigenous people due to road injury has fluctuated between 1988 and 1999, but has remained considerably higher than the hospitalisation rate for non-indigenous people.

Figure 26: Road injury hospitalisations (per 100,000 population): Western Australia, 1988-1999

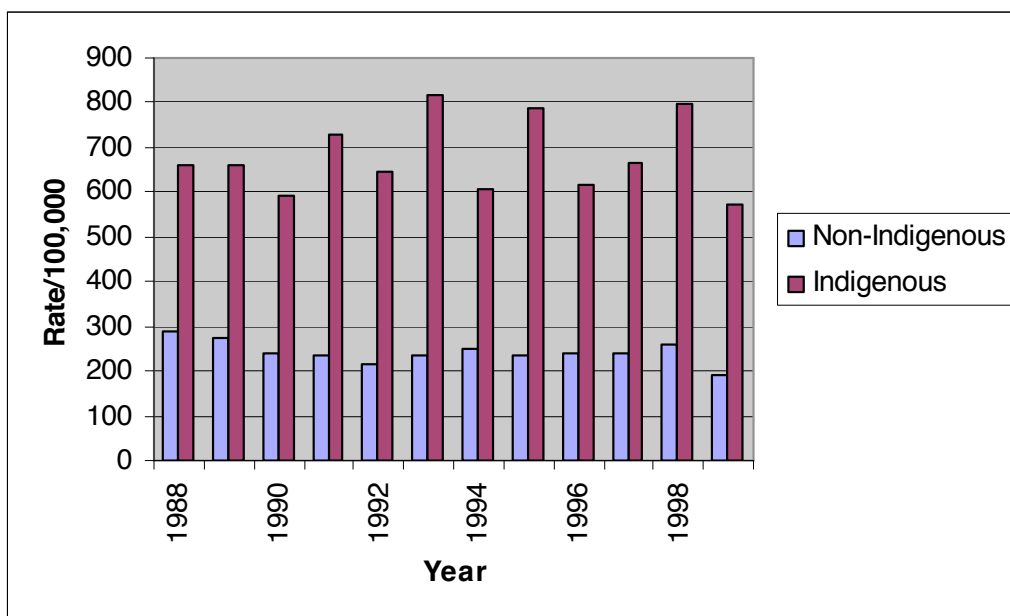
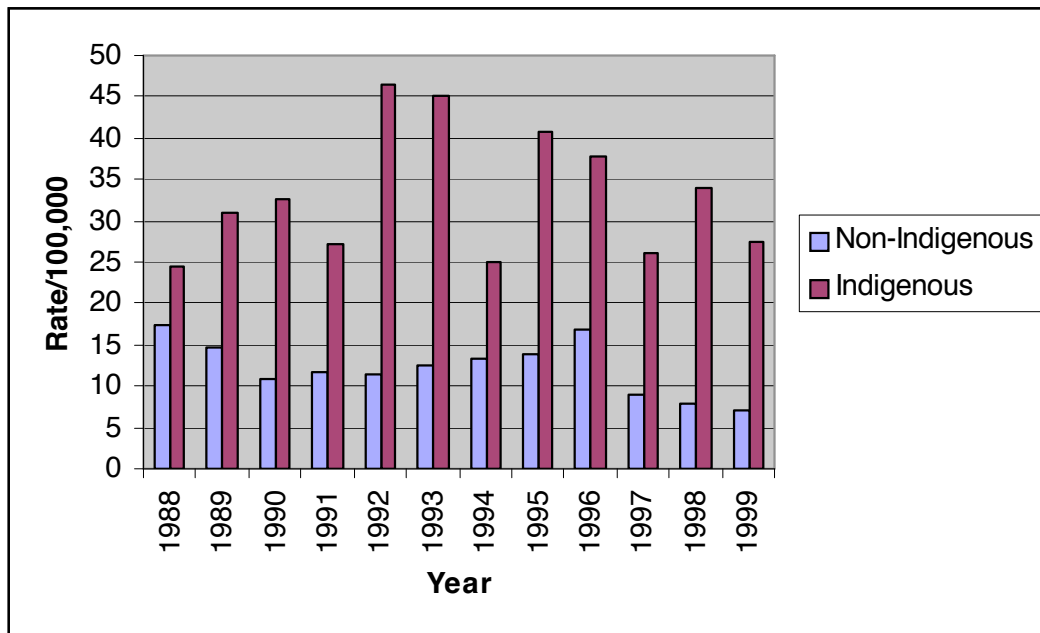


Figure 27 reveals that, like hospitalisation rates, road injury death rates for indigenous people in Western Australia fluctuate considerably but remain higher than the rate for non-indigenous people.

Figure 27: Road injury deaths: Western Australia, 1988-1999

Figures 28 and 29 show that males of both indigenous and non-indigenous status are over-represented in road crash related hospitalisations and fatalities. Indigenous males are almost twice as likely to have been hospitalised as a result of a crash, and almost three times as likely to have been killed, as indigenous females.

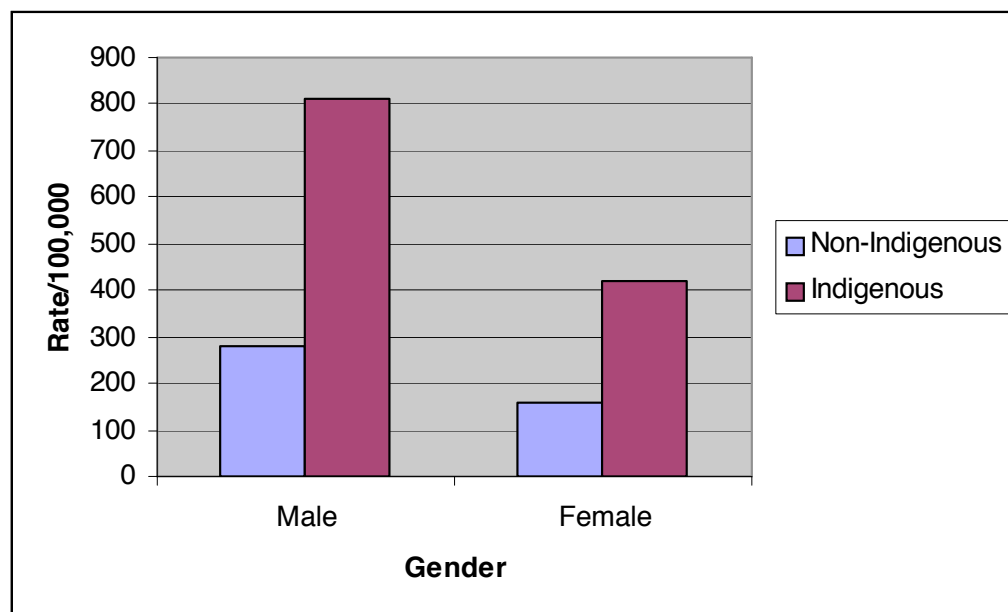
Figure 28: Road injury hospitalisations by sex: Western Australia, 1989 -1999

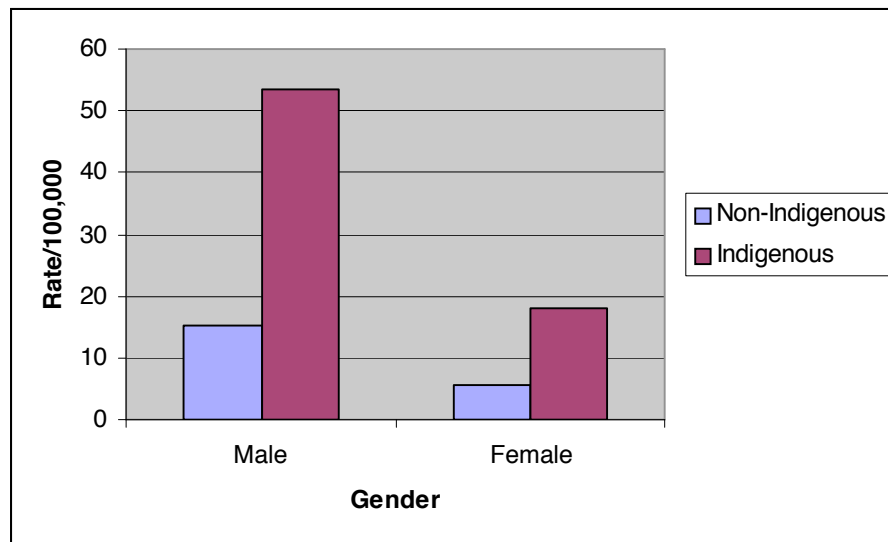
Figure 29: Road fatalities by sex: Western Australia, 1989-1999

Figure 30 shows that indigenous people in most age groups are more likely to have been hospitalised as a result of a road crash than non-indigenous people. Indigenous people over 65 years of age are less likely than their non-indigenous counterparts to have been hospitalised as a result of a road accident. Figure 31 shows that indigenous Australians of all age groups are more likely than their non-indigenous counterparts to have been killed in a crash. Figures 30 and 31 indicate that the indigenous people in the 15-24 age group were most likely to have been hospitalised or killed as a result of a road crash, although those in the 45-64 age group were only slightly less likely to have been killed.

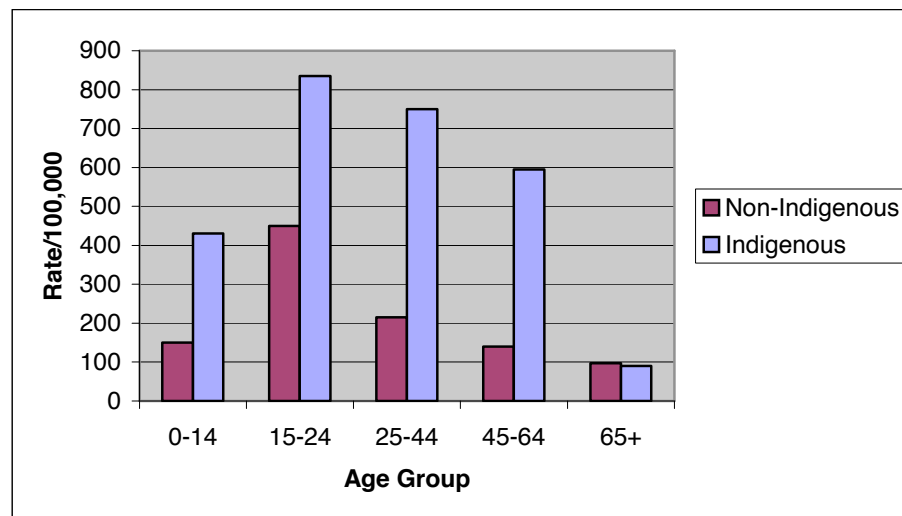
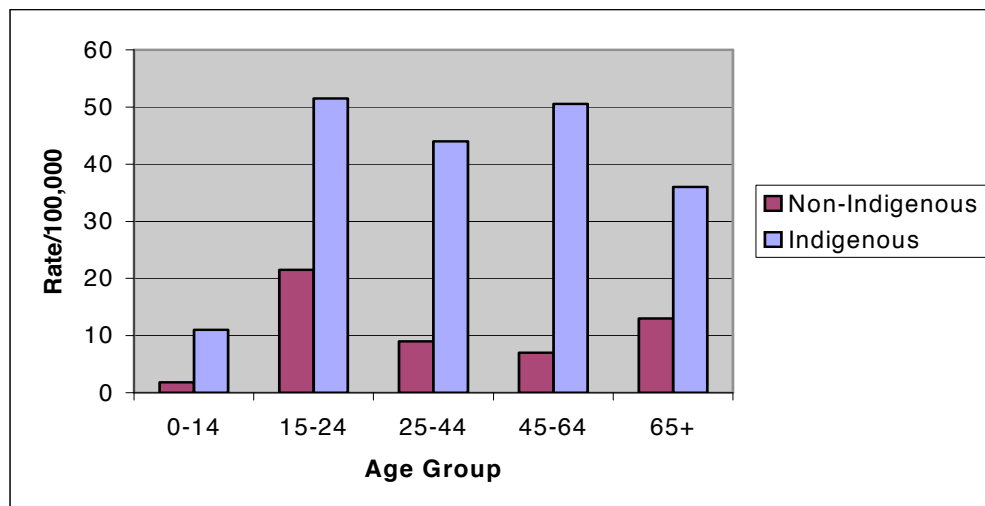
Figure 30: Road injury hospitalisation rates by age: Western Australia, 1989 -1999

Figure 31: Road fatality rates by age: Western Australia, 1989 -1999

Figures 32 and 33 suggest that more rural indigenous residents have been hospitalised as a result of a road crash when compared to metropolitan residents. Indigenous people are over-represented as casualties among both rural and metropolitan residents.

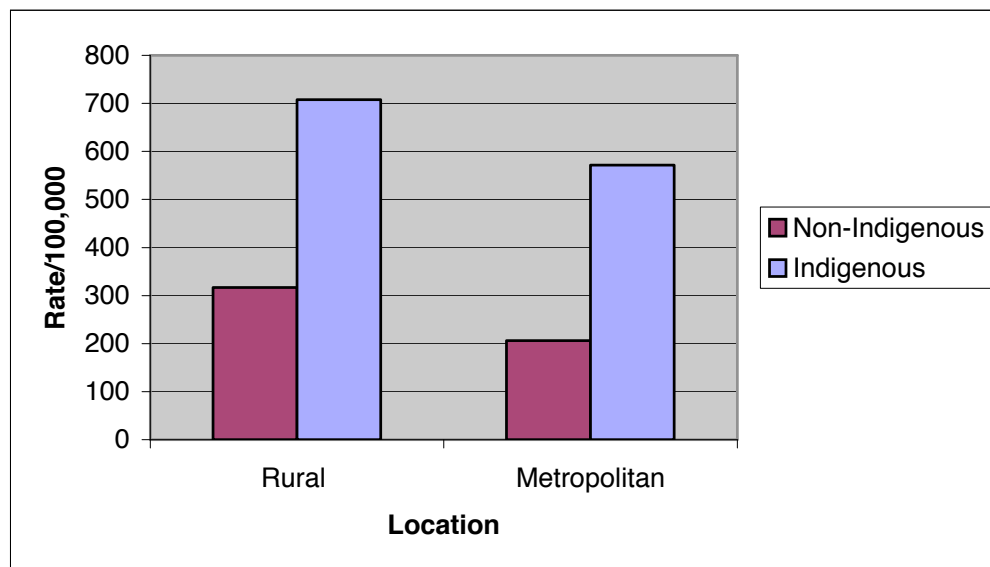
Figure 32: Road injury hospitalisation rates by location: Western Australia, 1988 -1996

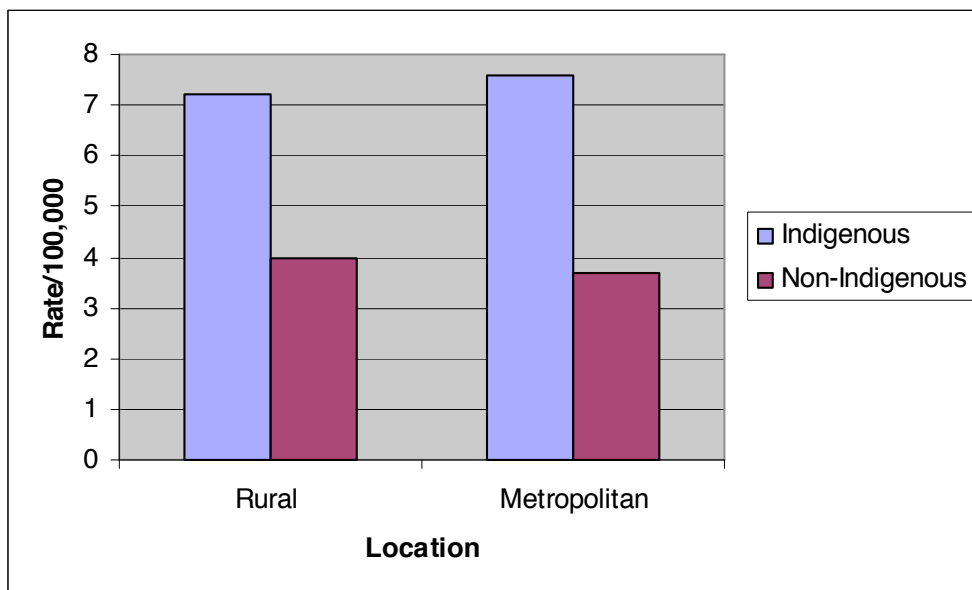
Figure 33: Road fatality rates by location: Western Australia, 1988 -1996

Figure 34 shows that most hospitalisations of indigenous people were a result of 'Hit Pedestrian,' 'Hit Object,' or 'Non-Collision' crashes. Figure 36 suggests that crashes of the same nature are responsible for most crash-related fatalities among indigenous people.

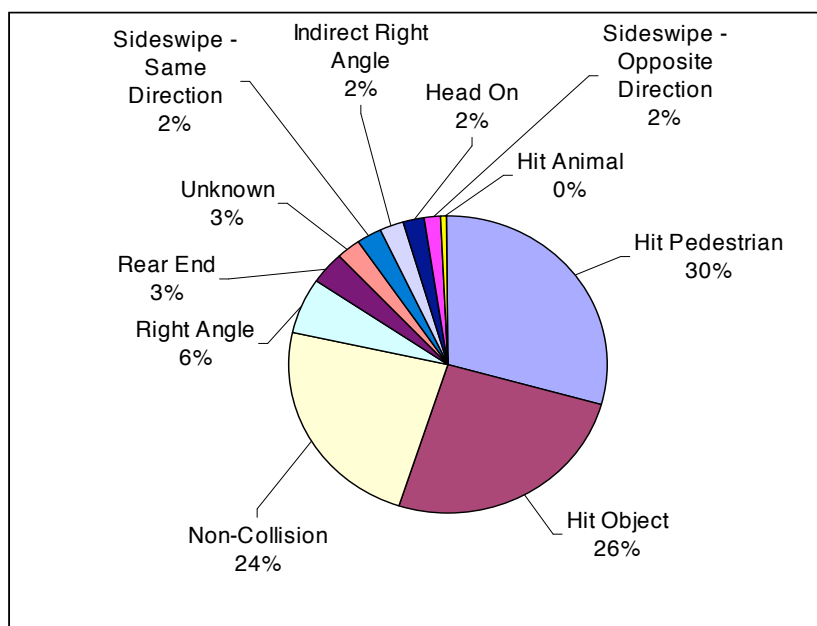
Figure 34: Nature of crashes resulting in the hospitalisation of indigenous people: Western Australia, 1988 - 1996

Figure 35: Hospitalisations of indigenous people by road user type: Western Australia, 1988 - 1996

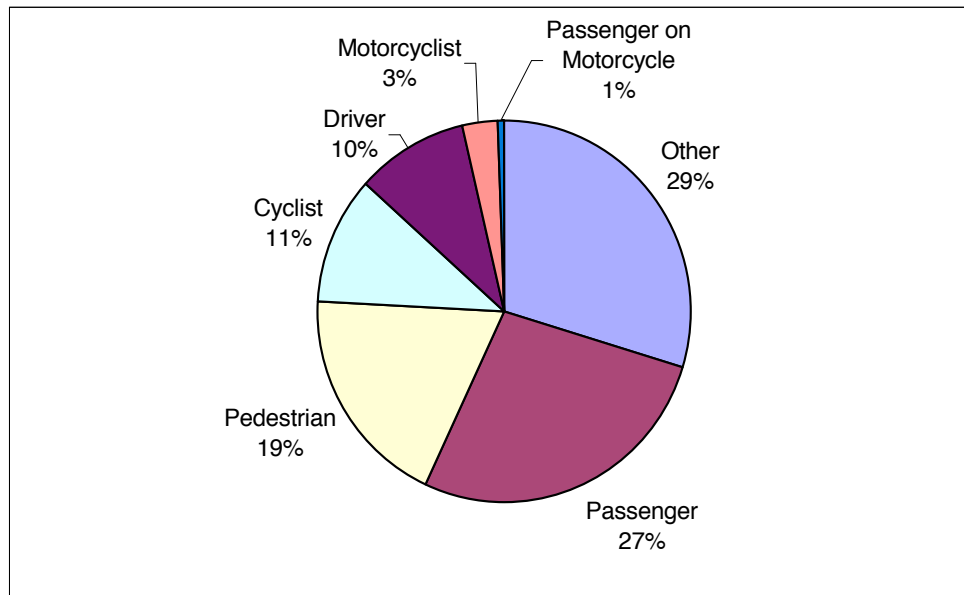
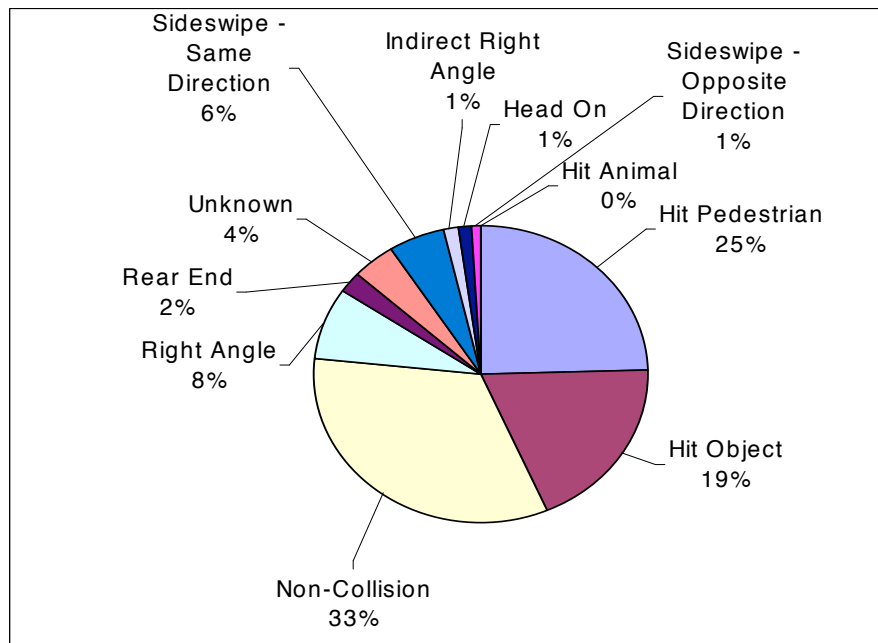


Figure 36 indicates that most indigenous people hospitalised as a result of a crash were either passengers in a vehicle or pedestrians at the time of the crash.

Figure 36: Nature of crashes resulting in deaths of indigenous people: Western Australia, 1988 - 1996



5 Consultation to identify current initiatives and research

The crash data analysis and literature review have highlighted the road safety issues facing Australian indigenous communities. The consultations were designed primarily to elicit information from indigenous road safety stakeholders about what is being done, or could potentially be done, to address these issues. Crash data availability and limitations, and stakeholders' opinions of the important road safety issues facing indigenous communities in their respective jurisdictions were also of interest. The key themes that emerged from the consultations are presented below. The results of the consultations are presented in their entirety within Appendix C of this report.

In terms of improving indigenous road safety in Australia, the general consensus appeared to be that a national approach would be less effective than State Action Plans and local working groups (overseen by a national group) which is the current approach. It was also apparent that indigenous road safety is typically seen to be the responsibility of transport and police authorities working in partnership with peak indigenous agencies and individual communities. Some key themes that emerged from the consultations in relation to the five issues covered within the survey are presented below.

5.1 Sources and quality of crash data

The consultations confirmed that indigenous status is currently only recorded in Queensland, Western Australian and Northern Territory crash databases. In other jurisdictions hospital data (cause of injury), coupled with usual place of residence, are used. The following issues were highlighted:

- Crashes which occur on non-public access or non-gazetted roads are not recorded in official statistics (Queensland).
- Some indigenous people do not identify as such during data collection and in other cases, the numbers are sometimes so small they cannot be published for privacy reasons.
- The problem of indigenous road safety is likely to be under-estimated based on the data which does exist.
- Health/hospital data for indigenous road crashes tend to be more comprehensive than police records because most tend to happen in rural areas, where medical assistance is usually more readily accessible than police services. South Australian representatives reported that hospital data tend to contain many more cyclist and motorcyclist crashes.
- There is consistency between jurisdictions in that figures suggest that indigenous Australians are about three times more likely to die on the roads than non-indigenous people.
- The introduction of the National Coroner Information System which has been available on a user pays basis through Monash University since 2003 should facilitate better data quality.

5.2 Key road safety issues

The following road safety issues were reported to be of particular concern to the stakeholders consulted:

- alcohol misuse
 - non-use of restraints and riding in open load spaces
 - unsafe pedestrian behaviour
-

- poor road conditions/remoteness
- dangers of sharing the road with trucks
- lack of licensing
- fatigue (to a lesser degree than other issues).

It should be noted that in areas where the data are poor, much of the evidence is anecdotal and/or may be based on remote crash characteristics rather than the characteristics of crashes involving indigenous people in particular. However, with the exception of fatigue, these issues correspond largely with the results of the literature review described in Section 3.2.

5.3 Road safety programs

Australian road safety programs identified during the consultations conducted are listed in Table 3. Please note that those programs marked with an asterisk are presented in Appendix C. The overseas programs that were identified during this study are described in Section 6.

Table 3: Initiatives to improve indigenous road safety (continued over page)

Development organisation/s	Description	Evaluation
General road safety		
*Queensland Department of Main Roads	The Remote Communities Services Unit of Main Roads provides training to the indigenous communities throughout Cape York and the Torres Strait. The main aim of the training is to increase the skill base in communities by offering culturally and technologically appropriate competency-based training. All training is project-based and increases communities' capacity to undertake their own infrastructure (including roads) maintenance.	No formal evaluation. Attracts substantial government funding and awards for Excellence.
*Roads and Traffic Authority, NSW	In conjunction with a committee of key Aboriginal stakeholders, the RTA has developed a high quality set of Aboriginal road safety public education resources for coverage in newspapers and television stations with a large indigenous following, under the <i>Bring the Mob Home Safely</i> campaign.	No formal evaluation.
*Northern Territory Department of Infrastructure Planning and Environment	In partnership with Northern Territory Police, the Road Safety Branch of the Department of Infrastructure Planning and Environment delivers road and rail safety awareness presentations to new Aboriginal Community Police Officers (ACPOs). At the presentations, a sample of road safety resources and materials is given to the ACPOs as a guide so that they can develop material appropriate to their communities.	None
*Northern Territory Department of Infrastructure Planning and Environment	A program is run in partnership with prison authorities and driver trainer educators which provides inmates who are trying to get their licence with some basic knowledge on road safety, targeting specific issues such as drink driving and the wearing of seatbelts.	None
*Northern Territory Department of Infrastructure Planning and Environment	As part of a larger ' <i>Driving With Road Trains</i> ' campaign in 2004, a TV commercial was produced for Aboriginal road users to inform them about their responsibilities as a road user and the need to be aware that they will be sharing the road with road trains.	None
*Northern Territory Department of Infrastructure Planning and Environment	The <i>Tracks Are For Trains Campaign</i> was developed to raise awareness of rail safety in remote areas prior to the opening of the new line between Alice Springs and Darwin in late 2003. The campaign urged communities to develop personal responsibility for rail safety – STOP, LOOK, LISTEN and THINK. The campaign utilised local media networks to increase ownership (ads often in local dialect); formed new partnerships with existing networks (Land Councils); and had a sound consultation process to develop culturally-appropriate messages and resources.	Currently being refreshed to maintain impact.

*also described in Appendix C

Table 3: Initiatives to improve indigenous road safety (cont.)

Development organisation/s	Description	Evaluation
General road safety		
Northern Territory Department of Infrastructure Planning and Environment	The Road Safety Branch has sponsored the Central Australian Aboriginal Media Association Footy Show. Australian Rules football is popular with Aboriginal people and communities and this means road safety messages can directly target Aboriginal road users not only in Alice Springs but in outlying communities.	None
*Charles Darwin University	A short educational video, which complements the larger <i>Remote Areas Driving Program</i> , helps students ensure they are ready to drive.	None
Central Australian Aboriginal Media Association	The <i>Aboriginal Road Safety Program</i> unit has sponsored the Central Australian Aboriginal Media Association Footy Show. This sponsorship allows road safety messages to be disseminated to Aboriginal road users not only in Alice Springs, but in outlying communities	None
*Western Australian, Northern Territory and South Australian transport authorities	<p>The National Aboriginal Road Safety Video <i>Corrugations to Highways</i> was released in 2002 to reduce the rate of Aboriginal people being involved in road crashes in rural communities. The resource was developed through extensive advice from Aboriginal Australians. The program comprises the video and an associated workbook. The video features 10 separate segments covering issues such as:</p> <ul style="list-style-type: none"> • pedestrian and cycle safety • driving to the conditions (including speed, road conditions and road rules) • getting a licence and vehicle registration • travelling in open load space • alcohol and other drugs • restraint use (including child restraints). 	No formal evaluation. However, the resource is widely used in schools and communities throughout WA, NT and SA.
South Australian and Tasmanian Departments of Infrastructure, Energy & Resources (DIER)	Local councils, supported by DIER, have formed Community Road Safety Partnerships (CRSP). CRSP committee members represent road safety interest groups in the community. The CRSP works on designing (or adapting) and implementing road safety programs to suit the needs of their local community. Projects have focussed on child restraints, young driver education, support for minority populations to gain their licence, and drink driving.	Committees often make informal evaluations (which have generally been positive). Evaluation of the whole program is currently being conducted in SA.
*Derby/West Kimberley Roadwise	Active in indigenous road safety, particularly pedestrian visibility and restraint use.	None identified

*also described in Appendix C

Table 3: Initiatives to improve indigenous road safety (cont.)

Development organisation/s	Title and description	Evaluation
Licensing		
*Northern Territory University and the Territory Insurance Office	The <i>Remote Areas Driver Training</i> program involves training community-based driving instructors and providing them with relevant and culturally appropriate resources to empower communities to take ownership of their driver training and road safety issues.	No formal evaluation but over 160 instructors trained, over 1000 people obtained a licence and a further 500 passed theory component.
*Department of Education and the Territory Insurance Office	The <i>Driver Trainer and Licensing</i> program provides subsidised professional driver training and education to any student who is a Northern Territory resident and over 16 years of age. The course aims to provide learner drivers with the basic knowledge and practical skills to become safe, efficient and skilful drivers.	No formal evaluation, but the program is well received and widely used.
*Queensland Police Service	The <i>Mobile Licence Testing Service for Remote Areas</i> is aimed at increasing the accessibility of the licensing process. As part of the program, licensing officers travel to remote or isolated indigenous communities to provide driver training and testing.	No formal evaluation, but high demand exists and a many licences have been issued.
*Queensland Transport	The <i>Queensland Aboriginal and Torres Strait Islander Drivers Licensing Project</i> aims to increase licensing rates among rural and remote communities by improving access to licensing services and making licensing processes and road safety material more accessible and culturally appropriate to indigenous peoples. The project is a joint initiative of Queensland Transport, CARRS-Q, and indigenous communities throughout Queensland and the Torres Strait. Queensland Transport has helped develop a Queensland Aboriginal and Torres Strait Islander Drivers Licensing Unit, which will be supported by a Whole of Government Coordination Committee.	A process and impact evaluation is secured for the entire program.
*Western Cape College (Queensland)	The Western Cape <i>All Age Driver Education Program</i> aims to increase the number of licensed drivers in the community by focusing on the literacy requirements necessary to pass the learner's test, and by developing the practical skills of defensive driving.	Not yet.
*Queensland Transport	The <i>Learner's Licence Training Project and Low Literacy Test</i> consists of a series of resources designed to increase comprehension of the licensing questions.	Not yet. 150 registered users.
*Mareeba State High School (Queensland)	The Mareeba State High School <i>Driver Awareness Program Workbook</i> aims to prepare students to successfully sit for their learners' theory test. The program is specifically for students with literacy difficulties who are old enough to sit for a theory test.	None

*also described in Appendix C

Table 3: Initiatives to improve indigenous road safety (cont.)

Development organisation/s	Title and description	Evaluation
Licensing		
*Townsville Correctional Facility	The <i>Townsville Correctional Facility Licensing Program</i> , assists indigenous inmates in providing proof of identity, provides training in literacy and numeracy, involves road rules testing to the approved standard within the prison; and results in learners' licences being issued to inmates upon release.	None yet. 5 learner's permits issued.
*Roads and Traffic Authority, NSW and Attorney General's Department	<i>On the Road</i> targets Aboriginal communities on the North Coast of NSW and aims to address barriers to obtaining driver's licences, including (i) difficulty in accessing and reluctance to use the regional RTA service centre; (ii) low levels of literacy; and (iii) changes to licensing procedures. The program offers driving lessons, basic computer training and mentoring. The State Debt Recovery Service has also been involved, negotiating fine payments with participants who have outstanding fines.	By December 2002: 60 people regained licence through fine negotiations, over 200 gained their licence. The program has 7000 enrolments per year.
*Roads and Traffic Authority, NSW	The <i>Community Based Driver Knowledge-Testing</i> program targets people who are unlicensed due to low literacy or who have access issues, or because they are uncomfortable attending a registry office. The program is run at 35 locations in New South Wales at sites which include TAFE Colleges, correctional centres, juvenile justice centres, the Aboriginal Land Council Office and community-based organisations.	Evaluation is in progress and the results will be made available when complete. Won award for improving access to justice.
*Roads and Traffic Authority, NSW	The <i>Community Based Driver Knowledge-Testing</i> program targets people who are unlicensed due to low literacy or who have access issues, or because they are uncomfortable attending a registry office. The program is run at 35 locations in New South Wales at sites which include TAFE Colleges, correctional centres, juvenile justice centres, the Aboriginal Land Council Office and community-based organisations.	Evaluation is in progress and the results will be made available when complete. Won award for improving access to justice.
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*South Sydney Council	<i>Driving for Employment</i> - focuses on the importance of having a licence for employment. Through free literacy training and a local public education campaign, the program aims to increase Koori licensing rates	None

*also described in Appendix C

Table 3: Initiatives to improve indigenous road safety (cont.)

Development organisation/s	Title and description	Evaluation
Restraints		
*VicRoads and the Victorian Police Service	The <i>Hawthorn Community Education Centre Pre-Drivers' Course</i> helps students with intellectual disability or from minority populations to prepare for the learner permit test by improving literacy, communication skills and awareness of road safety. The program also aims to help participants feel comfortable liaising with local police and other authority figures (eg. VicRoads staff).	No formal evaluation. Participants appear to enjoy the program and gain confidence from it. Some obtain their probationary licence.
*Northern Territory Department of Infrastructure Planning and Environment	As part of the larger Easter Campaign for 2005 that targeted the use of seatbelts, specific radio messages were translated into a number of Aboriginal languages for central and northern regions of the Territory and aired on indigenous radio stations.	None
*Northern Territory Department of Infrastructure Planning and Environment	The Re-education Campaign Targeting Riding in the Back of Trucks/Utes is being developed for a number of Aboriginal communities where there has been a history of people riding in the back of trucks/utes. The campaign is designed to reinforce why the law is in place. Two radio ads will be produced: one in English; and the other in a local dialect. Posters are also being developed to support the radio message.	None
Aboriginal Medical Service and Western Australian Police Service	If seatbelts are not being worn, police can require car owners to contact the South West Aboriginal Medical Service to hire a restraint (instead of receiving a fine).	None
* National Aboriginal Community Controlled Health Organisation	Baby capsules loaned out for a fee which is refunded upon return of the capsule.	None
Community development		
*Western Australian Aboriginal Road Users Taskforce	<i>The Aboriginal Road Safety Stakeholder Implementation Manual</i> , released in March 2005, promotes a community development approach to road safety interventions, focusing on pedestrians, unsafe travel (including restraint use, overcrowding, unsafe vehicles) and drink driving (see also Section 7.6).	None

*also described in Appendix C

Table 3: Initiatives to improve indigenous road safety (cont.)

Development organisation/s	Title and description	Evaluation
Vehicle purchasing and maintenance		
*Gordonvale State High School (Queensland)	The Gordonvale State High School <i>Learning to Drive and Owning a Car</i> program primarily aims to give students the opportunity to learn how to drive as competent and responsible drivers capable of maintaining their vehicle and providing first aid in the event of an emergency. The program offers the opportunity for students to save a deposit for their first car. Some of the program was not implemented.	None. Only 40 out of a possible 130 students took part. Only 8 were indigenous. Funding discontinued.
*Roads and Traffic Authority and the Department of Fair Trading, NSW	<i>Kooris and Cars</i> focuses on providing indigenous people with safety and roadworthiness knowledge for selecting vehicles. Information sessions are a free service offered throughout New South Wales which provides participants with a hands-on demonstration covering basic mechanical and safety checks. Legislation regarding L & P plates, the knowledge test, and information about licence applications, cancellations and renewals is also covered.	None
Alcohol		
Roads and Traffic Authority, NSW and Motor Accidents Authority	The <i>Sober Driver Program</i> consists of nine two-hour sessions conducted over nine weeks. Issues addressed include consequences of drink driving, effects of alcohol on driving, managing drinking situations, alternatives to drinking and driving, relapse prevention and stress management.	None
*Roads and Traffic Authority, NSW	The Annual Aboriginal Rugby League Knockout run over the October long weekend is the only alcohol free adult sporting carnival in New South Wales. This is the largest cultural event attended by Aboriginal people. The RTA runs an annual state-wide and regional fatigue campaign to coincide with competition. In addition, the RTA implemented a drink driving public education campaign to also coincide with the competition, as well as providing alternate transport options for people attending the event.	None
NSW Department of Correction Services, Aboriginal Drug and Alcohol Services	The Aboriginal Grog and Driving Course, designed for delivery in either a correctional setting or in TAFE colleges to persons convicted of driving offences is aimed at reducing recidivism of driving offences among indigenous people. The course was specifically designed to be consistent with effective Aboriginal learning styles. It employed a group rather than individual learning approach and provided demonstrations as opposed to didactic teaching and key messages were repeated. No reference to this project post 2002 could be identified.	None

*also described in Appendix C

Table 3: Initiatives to improve indigenous road safety (cont.)

Development organisation/s	Title and description	Evaluation
Strategy development		
*Roads and Traffic Authority, NSW	The <i>Aboriginal Action Plan 2001-2006</i> sets priorities for transport and road safety issues impacting on indigenous people. Central to the plan was the appointment of an Aboriginal Programs Manager and seven Regional Program Consultants who are responsible for targeting regional road safety issues.	None
Road infrastructure		
*New South Wales Department of Aboriginal Affairs	The <i>Aboriginal Communities Development Program</i> is a capital works program to upgrade living conditions in Aboriginal communities. This includes upgrading essential safety infrastructure such as roads, footpaths and street lighting.	None
Pedestrians		
*NSW Police, Crime Prevention Division, Dept of Aboriginal Affairs & Dept of Community Services	<i>Aboriginal Community Patrols</i> involve volunteers driving around at night in buses, providing a protective presence and transporting young, "at risk" people home or to some safe place to reduce involvement in unlawful & anti-social behaviour. Guidelines for establishing Community Patrols are available at http://www.lawlink.nsw.gov.au/cpd or on CD-ROM.	Positive evaluation of a pilot program and eight patrols in operation.
*Northern Territory Department of Infrastructure Planning and Environment	The <i>Vulnerable Road Users Pedestrian Campaign</i> is being developed to improve the safety of road users in the urban environment. A core area of the campaign will focus on itinerant Aboriginal pedestrians that visit and live in larger urban centres. An existing program called the ' <i>Tea & Coffee Run</i> ' that goes to itinerant camps and discusses safe pedestrian behaviour in partnership with Mission Australia's Day Patrol will be incorporated into the campaign.	None
Knowledge transfer		
Queensland Health	The 'Community, Action Planning and Information Resource' (CAPIR) CD-ROM helps communities to identify available individual capital, barriers, and facilitators to change. The CAPIR is not content-specific and walks users through the process to achieve change: Reflecting → Interpreting → Deciding → Acting → Evaluating.	Feedback suggested that the package is 'user friendly' and culturally appropriate for rural and indigenous populations.
*Australian Transport Safety Bureau	The <i>HealthInfoNet Indigenous Road Safety Website</i> will provide The Internet based resource is aimed at increasing awareness of existing information pertaining to indigenous road safety and of relevant projects.	None
Victorian Police Service	A resource kit for police identifies Aboriginal services in the locality to help link police with these organisations.	None

*also described in Appendix C

There appears to be an emphasis on licensing programs in most jurisdictions. Somssich (2004) suggests that in the Northern Territory at least, unlicensed driving is a factor in the over-representation of indigenous people in motor vehicle crashes and subsequent injury (see also Section 3.2.3) as unlicensed driving is associated with an absence of driver training.

No programs specifically addressing pedestrian issues were identified, although aspects of pedestrian safety are incorporated within some programs. Despite the focus on licensing programs, there does seem to be a wide variety of road safety programs being delivered, aimed at several different aspects of road safety and a range of population groups (young people, offenders, the unemployed, indigenous people working in road safety, others working in indigenous road safety).

Although only one program aimed at community development was identified through the consultations, two additional community development initiatives were identified through the literature review, the *Community Action Planning and Information Resource* and *Aboriginal Community Patrols*. These initiatives are described in Section 7.6.

Overall, the consultations revealed a need for more thorough evaluations of programs and initiatives. Although many programs are monitored using some measure of exposure, for example, licences issued, the number of students who attend or the length of time for which the program has been running, few more detailed evaluations are carried out. Although often very difficult to perform, evaluations that can go some way toward isolating the aspects of a program that are important for success would be especially valuable.

The consultation process revealed that best practice examples of road safety programs for indigenous Australians often involve group work and interactive learning, which may be most effective if led by a community-based road safety educator. Several of the programs listed in Table 3 are described in more detail in Section 7, as examples of programs that contain some other important elements for success.

5.4 Current or proposed research

Several current and proposed research projects and programs were identified during the consultations.

- The George Institute, in partnership with the Roads and Traffic Authority and New South Wales health has applied for NHMRC funding for an injury prevention program entitled 'Safe Koori Kids.' The program will use a community capacity building approach.
 - Land Transport New Zealand and Otago University are working to examine the quality of crash casualty data and ways to encourage police to record ethnicity.
 - A PhD, funded by the National Health and Medical Research Council and undertaken by one of the authors of this report (Colin Edmonston) will examine the trip characteristics of indigenous crashes using remote facility/community clinic (health) data and narratives from crash patients in Northern Queensland.
 - Colin Edmonston (in partnership with Dr Shore of the University of Colorado) is currently conducting research to quantify cultural and environmental contributors to indigenous crash involvement.
 - Flinders University's Research Centre for Injury Studies is currently investigating alternative transport options for Aboriginal people including community-run transport.
 - Research has been carried out by Dr Peter Rothe at the Alberta Center for Injury Control and Research in Canada measuring seatbelt wearing and social dimensions on traffic safety in First Nations and Aboriginal communities. However, this research is very much in its infancy.
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- CARRS-Q is completing a handbook for road safety professionals working in the indigenous context. The book will be entitled 'Inside communities, outside the box: Practical tips for working with and researching Aboriginal and Torres Strait Islander People' and was based on consultations with indigenous people and communities from around Australia.

6 Overseas practice

Material relating to indigenous road safety issues within New Zealand, the United States of America and Canada was identified during the literature review and during the consultations. This material is summarised below in order to provide a brief overview of the principles guiding overseas practice. While it seems that Canadian efforts are just beginning to gain momentum, the emphasis in New Zealand and the United States appears to be on community ownership of road safety initiatives.

6.1 New Zealand initiatives

The rate of deaths from transport accidents among Maori New Zealanders has been reported to be almost double that of non-Maori New Zealanders (New Zealand Health Information Service 2004). Many of the programs aimed at addressing the over-representation of Maori people among road casualties are community projects funded and supported by The Community Road Safety Programme (CRSP) which is administered by Land Transport New Zealand. The CRSP has been developed largely on the basis that *“community involvement in road safety issues is essential to the success of New Zealand’s road safety strategy”* (CRSP 2004). For example, a number of community organisations have established courses to assist Maori (and Pacific Island peoples) to obtain a driver’s licence by providing an environment where they feel at ease because trainers are from their own culture, use their language and/or are experienced in teaching people with low literacy skills. As well as providing funding, Land Transport New Zealand offers guidelines for course providers (Road Safe Auckland 2005). Other projects, either currently underway or recently completed that were identified in the CRSP project database (available at <http://www.crsp.net.nz/search/searchprojects.php>) include:

- The employment of Road Safety Coordinators who, among other tasks, develop and monitor the Regional Road Safety Plan, and undertake regional co-ordination of selected issues such as older drivers, drink driving, youth and Pacific communities.
- A Youth Road Safety/Road Trauma Hui (gathering) aimed at Maori youth and promoting a message of not combining alcohol and driving and the dangers of inappropriate speed.
- Education and publicity to promote successful CRSP programs to the wider Maori communities and provide training to trainers.
- The running of a first time minor driving offence program.
- Activities to supporting older Maori drivers in the transition of giving up licences/maintaining independence and assisting in their licence renewal process.

In addition to CRSP programs, the following three projects were identified.

- The Te Wananga o Aotearoa’s Rotorua police service’s national certificate in police and security duties is aimed at encouraging Maori people to join the police force. The development of this course was guided by the notion that Maori people are in the best position to inform crime prevention and road safety directions among their people.
 - In 2000 Land Transport New Zealand contracted the Manukau Urban Maori Authority (MUMA) to deliver ‘Street Talk’ courses to Maori learner drivers. The course consists of a series of six sessions, each of which focuses on changing driver attitudes through critical self-reflection. Learner drivers compile a logbook of their driving and discuss their experiences with trainers and other course participants. Successful completion of a course allows drivers to reduce their time on a restricted licence by six months. MUMA employs Maori trainers to deliver the course to Maori students (Land Transport New Zealand 2000).
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- In 2003 the Accident Compensation Corporation (ACC), MUMA and Family Start together provided 1000 child car seats to high risk Maori and Pacific families at reduced rent to increase usage rates (ACC 2003).

6.2 United States of America initiatives

Native Americans are twice as likely to die in motor vehicle crashes than other U.S. residents in general and road trauma is the third leading cause of death among Native Americans. Inadequate restraint use and alcohol intoxication have been identified as issues requiring particular attention (Mineta 2004).

The 'Safe Tribal Communities' injury prevention model has been adopted by over 25 native American tribal communities, with crash related injuries being the primary focus. The model is based on the idea that injuries are predictable and preventable and that local people are in the best position to solve local problems. A seven step process is promoted.

1. Form a coalition – recruit stakeholders, a lead organisation, a coordinator, an injury data expert and set meeting times and locations.
2. Create a tribal profile – using demographic data, roadway usage data and environmental data.
3. Examine local injury data – from hospitals, health services and police.
4. Prioritise injury problems using data – based on injuries, costs and concern among tribal members.
5. Organise subcommittees – these may include health officials, police, businesses, educators, emergency services, tribal leaders and tribal members.
6. Identify and implement prevention strategies – enforcement, education and/or engineering based interventions.
7. Measure the impact and costs versus benefits of these strategies – use injuries, financial costs, behavioural change, resources accessed and/or tribal attitudes as outcome measures (National Highway Traffic Safety Administration 2003).

The U.S. Secretary of Transportation has indicated that the activities undertaken by tribes to address issues within their own Nations include:

- passing safety-belt-use laws and .08 blood-alcohol-level laws
- conducting safety belt, child safety seat, and sobriety checkpoints
- participating in safety belt and impaired driving enforcement mobilizations
- instituting court programs for 'driving while intoxicated' offenders
- training Child Passenger Safety Technicians (Mineta 2004).

Three road safety related interventions, two locally based and one national, are highlighted below.

- Although alcohol is banned in the Pawnee Nation, alcohol-related crashes were responsible for an increasing number of community members. As a result, Pawnee Nation Tribal Council passed an "Underage Drinking Policy" in 2003. The policy gives the Pawnee National Tribal Court the authority to impose rules, laws and regulations to help implement the policy and address the problems of youth offenders and of adult providers of alcohol (NHTSA no date).
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- Zaloshnja et al. (2000) report on an evaluation of a street lighting project aimed at reducing pedestrian injuries, especially alcohol-related pedestrian injuries. Cost-benefit analysis revealed that the installation of 28 street lights along a 1.8 kilometre length of highway was followed by an average reduction of 2.5 pedestrian crashes per year and a benefit-cost ratio of 10.
- The Indian Health Service (IHS) is responsible for the Safe Native American Passengers (SNAP) program. In conjunction with tribal staff, the IHS developed the SNAP course to introduce students to the basic concepts of child passenger safety. The course consists of eight hours of instruction and four hours of fitting station experience and is intended for those who work in Native American Communities.

6.3 Canadian initiatives

The leading cause of injury and death among the First Nations and other indigenous people of Canada are motor-vehicle related accidents. Although Canada has yet to adopt a strategic approach to address Aboriginal and First Nations road safety, the First Nations and Inuit Health Branch (FNIHB) of Health Canada (the federal department responsible for delivering or ensuring the provision of Public Health services to First Nation peoples living on reserve land) has established a national Working Group for First Nations and Inuit Injury Prevention. This Working Group has recently put together a strategic plan to begin dealing with road safety.

The plan is to be activated in the near future, with the various regions of Canada beginning to hire coordinators to address the incidence of injuries. However, regional priorities will vary according to injury epidemiology. The main area that continues to receive attention in the communities, however, is restraint non-use as there is hardly any enforcement of traffic acts on Aboriginal lands. Some community-based activities on driver education, all-terrain vehicle education and bicycle safety have taken place but there is no national funding appropriated to carry out these preventative measures and as yet, there are few programs in Canada dealing specifically with traffic issues and First Nation people.

7 Research and intervention priority areas

Sections 3 and 4 of this report have provided an overview of the road safety issues facing indigenous communities in Australia. Sections 5 and 6 have provided an overview of some of the activities currently being undertaken to address indigenous road safety issues in Australia and overseas. This section of the report provides guidelines on what should be done in Australia to improve indigenous road safety. Examples of indigenous road safety interventions are cited throughout to provide guidelines for the development of indigenous-specific road safety countermeasures. Some of these interventions were identified through the consultations, others were identified during the literature and internet search.

7.1 Improving the quality of indigenous road safety data

'Reliable data on the extent of road trauma are required to develop adequate road safety countermeasures. There is a clear need for improved information on the extent of involvement of indigenous people in serious road crashes' (McFadden et al., 2001, p.1).

Section 2.1 of this report summarised the limitations of indigenous road crash data. There appears to be a pressing need to improve both the availability and quality of indigenous road fatality and injury data. According to Moller et al. (1996)¹, who reviewed literature and programs related to injury prevention among indigenous populations, the immediate challenges are to:

- develop consistent and valid practices for identifying indigenous people in hospital collections.
- establish accurate estimates of indigenous populations by smaller geographic areas.
- use classification systems that permit culturally appropriate reporting of injury among indigenous people.

Although published almost a decade ago, these challenges are still applicable. In relation to road safety, Motha (2004) suggested that the following measures to improve national consistency of road trauma data be considered:

- police to record indigenous status on crash report forms in all jurisdictions
- a standard question be designed to identify indigenous persons and to be applied throughout Australia
- road agencies to enhance existing road crash databases with information on indigenous status that is gleaned from other sources such as hospital records and coroner's records and death certificates
- coroners to introduce a requirement for indigenous status to be recorded in all cases (not just for indigenous persons)
- the development of procedures that will enhance the ability of all agencies involved in crash investigation or casualty treatment to identify indigenous status.

In relation to the linking of existing sources of data, the Western Australian Road Injury Database (WARID) links hospital separation data (which identify indigenous status) with police

¹ Most of the remainder of the recommendations put forward by Moller et al. (2003) pertain to the development of the Aboriginal and Torres Strait Islander Injury Prevention and Safety Promotion Plan. The Aboriginal and Torres Strait Islander Injury Prevention Action Committee (ATSIIIPAC) has since released a draft version of the document, which is entitled the National Aboriginal and Torres Strait Islander Safety Promotion Strategy (ATSIIIPAC, 2004). The document, which covers the promotion of safety in general rather than road safety specifically, will complement the Draft National Injury Prevention Plan: 2004 Onwards (Strategic Injury Prevention Partnership, 2004).

crash reports (which do not). Western Australia is the acknowledged leader in this field, as other jurisdictions do not yet have this capacity. While acknowledging the problems associated with the available data, Rosman (2001) has suggested that the linkage process required to develop and maintain the Western Australian Road Injury Database has provided road safety researchers and practitioners with '*a much better understanding of the problems of underreporting and misclassification and widespread acceptance ... of the benefits of linking all available information about road crashes and their consequences*' (p.87).

There is potential to improve the analytic capacity of the WARID through the collection of additional information such as occupant position, occupant use of restraints and vehicle identification numbers (Brice 2000; Cameron & Oxley 1995). Other Australian jurisdictions could learn from the Western Australian experience by seeking to establish similar collaborative links between government databases.

As a preliminary step toward increased linkages between Queensland databases, the Queensland Chapter of the Australian College of Road Safety held a seminar in June 2000. Although the seminar was aimed primarily at increasing road safety practitioners' awareness of data availability issues, the potential for linking Queensland Ambulance Service, Queensland Health, Queensland Injury Surveillance Unit, Queensland Police Service, Motor Accident Insurance Commission and Queensland Transport databases was considered. Although a lack of resources has so far meant that there are no immediate plans to embark upon linking these databases, it is possible that the Chapter will attempt to address this issue in the future (personal communication Watson 2005).

The original version of this scoping study (Macaulay et al. 2003) indicated that an increased understanding of the environmental risk factors underpinning rural indigenous road crashes could also be gained by building a geo-coding function into crash databases. All Australian jurisdictions apart from Tasmania and the Australian Capital Territory now geo-code crash sites. The next step is analysis of this geo-coded crash data to highlight the spatial characteristics of the crash environment, thus providing a more complete description of the causal factors of crashes involving indigenous Australians.

7.1.1 Monitoring progress in terms of known risky practices with existing data sources

Despite the limitations inherent in the data that is available, it is important that progress in terms of indigenous road trauma are monitored to provide an indication of which aspects of the problem are most pressing and which seem to be improving. One of the recommendations to arise from the 2004 indigenous Road Safety Forum and Working Group was to monitor progress in addressing indigenous road safety issues, including the following risky practices:

- seatbelt wearing, including child restraints
- alcohol misuse
- risky pedestrian behaviours
- unlicensed driving.

In order to monitor progress on these issues, a baseline must be established. One option would be to conduct research projects aimed specifically at gathering data on these behaviours among indigenous Australians. It is more cost-effective, however, to use existing data sources, especially where results are to apply to large regions.

The types of analyses just presented, using state road authority data, could be useful in establishing some of this baseline information, at least for the jurisdictions where indigenous status is recorded within road crash databases (Queensland, Western Australia and the Northern Territory). Each of these jurisdictions also collects information on:

- blood alcohol concentration (in some cases)
- restraint use (for adult and child casualties)
- type of road user (so pedestrian crashes can be identified).

Traffic offence data collected by the police could also be used as a proxy measure of restraint use, alcohol misuse and risky pedestrian behaviours.

For pedestrian crashes, national data are available, but only for fatalities. The National Coroners Information System (NCIS) contains information about every death reported to an Australian coroner since July 2000 (January 2001 for Queensland). This resource will allow the monitoring of fatalities only, but through use of the International Classification of Diseases - 10th Revision (ICD-10) codes it would be possible to identify indigenous Australians who were killed as pedestrians. It would also be possible, using this code, to determine what type of vehicle struck the pedestrian.

The police narrative reports that are linked to each fatality could be used to determine patterns in restraint use, while toxicology reports would provide information on blood alcohol content. However, state road authority crash data would be more appropriate for this purpose due to the fact that it will provide information on all casualties, not just fatalities.

Whatever data source is used as a baseline, it will be important that the baseline reflect not just a single year, but an average of at least five years' data so that random fluctuations in the variables of interest do not have an undue impact.

7.2 Understanding of indigenous perspectives on health/injury, the acquisition of health knowledge, 'road safety' and transport

Brice (2000) suggested that future analyses go beyond the identification of proximate road safety risk factors (such as intoxication and non-compliance with restraint laws) to seek an understanding of why such factors are prevalent among indigenous people. To do this, researchers need to look beyond road crash data and examine the historical and cultural factors influencing the beliefs and perceptions indigenous people hold regarding health/injury, the acquisition of health knowledge, 'road safety' and transport (ATSIWG 2002). In-depth coverage of these complex issues is beyond the scope of the current review, but an overview of issues related to indigenous perspectives on health, and how this can be incorporated into road safety programs is provided.

While there are differences between the health beliefs held by different indigenous communities, the National Aboriginal and Islander Health Organisation (1989 cited in ATSIWG 2002) generically defined indigenous health as '*... the well-being of the individual and the social, emotional and cultural well-being of the whole of the community. This is a whole-of-life view and includes the cyclical concept of life-death-life*' (p.29). An indigenous person's injury is often interpreted in relation to its effect on the individual's ability to fulfil social and other community commitments. So, when a treatment impacts negatively on one's ability to meet community obligations, injured indigenous people are likely to refuse or discontinue treatment. It is also noted that decisions about seeking treatment will not be made by the injured party alone (Morgan et al. cited in ATSIWG 2002).

The way in which health knowledge is acquired in indigenous communities also differs greatly from mainstream society. Morgan et al. (1997) reports that indigenous people do not relate to many abstract concepts and have '*... a preference for concrete knowledge recognizably related to the immediate context of their lives ... actual, tangible things experienced directly or indirectly*' (p.598). Turton (1997) added that indigenous cultures learn about health issues through stories, authoritative knowledge of elders, spiritual knowledge (knowing oneself) and commonsense models of illness and health. So, for a new initiative to be successful, it should tap into one of these means of dissemination.

Goodin (1993) provided an example of one such program. The Aboriginal Grog and Driving Course was based around a facilitators' manual and designed for delivery in either a correctional setting or in TAFE colleges to persons convicted of driving offences. The course aimed to reduce recidivism of driving offences among indigenous people and addresses issues such as the relationship between BAC and changes in driving behaviour, the action of alcohol on the central nervous system, the rationale behind drink driving legislation and key factors influencing blood alcohol level. The course ran weekly over six sessions with each session running for approximately two hours and specifically designed to be consistent with effective Aboriginal learning styles. It employed a group rather than individual learning approach and provided demonstrations as opposed to didactic teaching (doing rather than just telling) and key messages were repeated.

A cultural understanding of the role that transport and 'road safety' play in indigenous communities should also be reflected in indigenous road safety interventions. Knowledge of these concepts will provide valuable insight into the feasibility of modal-shift solutions to indigenous-specific problems. Coggan et al. (2000), for example, suggests that road safety should be addressed within the broader domain of injury prevention to improve outcomes.

7.3 Research protocol in indigenous communities

Undertaking research in indigenous communities requires careful attention to ethical guidelines. The essential first step in any indigenous research project, be it aimed at intervention development or data collection, is that the research team must: gain informed consent from the appropriate figurehead in the indigenous community, develop mutual rapport, and acknowledge the individual community's ownership of the data. Throughout the duration of the project, the research team must '*... undertake extensive community consultation, negotiation, and collaboration to ensure that the research is beneficial to the indigenous community*' (Dunne 2000 p.6).

Henderson Simmons Bourke and Muir (2002) elaborate on this idea and provide a range of guidelines for non-indigenous people undertaking research among indigenous populations. A summary of some of these guidelines is presented below.

- Seek approval from community members at the proposal preparation stage.
- Employ a project steering committee (of community members) to oversee the research.
- Employ an indigenous worker to advise the project team of culturally appropriate conduct and to oversee the activity of non-indigenous people working in indigenous communities.
- Research material and data must remain the property of the community but should not have access to individual level data (to protect the confidentiality of participants).
- Acknowledge the assistance of the indigenous community, individuals and organisations in project reports.

The National Health and Medical Research Council's (NHMRC) Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research (2003) also provide guidance on the design and conduct of ethical research with indigenous peoples. The guidelines are aimed at researchers and human research ethics committees and have the same status as, and are to be used in conjunction with, the National Statement on Ethical Conduct in Research Involving Humans (NHMRC, 1999). Both documents are to be used together. <http://www7.health.gov.au/nhmrc/ethics/human/ahec/projects/values.htm> Six values underlie these guidelines:

- Reciprocity – researchers should demonstrate benefits that are valued by the community.
 - Respect – researchers must acknowledge and affirm people's right to have different values and should not be 'blind' to difference.
-

- Equality – researchers should consider whether the ways that indigenous communities are asked to participate in research demonstrate equality.
- Survival and protection – researchers must demonstrate that they will not repeat the mistakes that have led to a perception among indigenous communities that research is an exploitative exercise.
- Responsibility – researchers have a responsibility to do no harm to indigenous individuals or communities and to remain accountable.
- Spirit and integrity – researchers should approach research with respect for the cultural inheritance of past, current and future generations and must exhibit credibility.

The guidelines were developed by the NHMRC in partnership with a number of bodies which included representatives of the Aboriginal controlled health industry. According to the NHMRC (2003, p. 8) the guidelines:

'articulate the meaning to Aboriginal and Torres Strait Islander Peoples of each of the six values identified and agreed upon at a workshop held in Ballarat in June 2002...then drew out the implications of each value for research, and how researchers and research proposals might demonstrate engagement and consistency with each value. The participants in the Ballarat workshop saw this as an appropriate way to ensure that Aboriginal and Torres Strait Islander values are at the heart of ethical assessment'

Commitment to these guidelines (which will in future be supplemented by the CARRS-Q handbook mentioned in Section 5.4) will maximise the validity of the research and the community's ownership of any research products (for example, interventions or legislative reform).

7.4 Government commitment

The Council of Australian Governments (COAG) pledged their commitment to a 'whole of Government' approach to the delivery of programs and services to indigenous communities. COAG agreed to trial working together with indigenous communities to provide more flexible programs and services based on priorities agreed with the communities involved. The aim of these trials will be to improve the way governments interact with each other and with communities to deliver more effective responses to the needs of indigenous Australians. Eight trial sites have been selected (one in each State and Territory). Although the initiative is not aimed at improving road safety specifically, COAG expects that the lessons learned from this initiative will be applied more broadly in future initiatives. More information on the COAG initiative is available from <http://www.indigenous.gov.au/coag/default.html>.

To underpin these cooperative efforts COAG agreed in June 2004 to the National Framework of Principles for Government Service Delivery to Indigenous Australians. The principles address:

- Sharing responsibility – committing to cooperative approaches on policy and service delivery and to indigenous participation at all levels.
 - Harnessing the mainstream – ensuring that indigenous specific and mainstream programmes and services are complementary and supporting indigenous communities in harnessing resources.
 - Streamlining service delivery – delivering services that are coordinated, flexible and avoiding duplication.
 - Establishing transparency and accountability – strengthening accountability of governments for the effectiveness of their programmes and services and of organisations for government funds.
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- Developing a learning framework – sharing information about what is working and what is not while striving for best practice.
- Focussing on priority areas – tackling agreed priority areas.

These principles are available in full at

http://www.coag.gov.au/meetings/250604/attachments_b.pdf.

7.5 Community participation and tailored community change strategies

The 2004 COAG principles of *Sharing responsibility* and *Harnessing the mainstream* both incorporate the notion that service delivery to indigenous Australians will be enhanced if indigenous communities play an active participatory role. In Australia there has been a rapid expansion of community participation in road safety initiatives and preliminary evaluations suggest they are highly effective (Howat et al. 2001). According to Howat et al. (2001) and Stockwell et al. (2001), community engagement and ownership of programs are the most important ingredients for successful health interventions. For an intervention to be effective, the target population (that is, indigenous road users) needs to be actively involved in both the development and implementation of strategies to ensure that they are directly related to local culture. Moller et al. (2003) also suggested that community control and involvement were often reported as important factors in the success of the indigenous injury prevention programs they reviewed. The following ways in which these factors can be achieved were noted by Moller et al.

- having a steering group of stakeholders and/or a community reference group
- attempting to include the whole community and not just the dominant families
- implementing programs that are appropriate to issues identified by the community
- involving the community in identifying and assessing the relevant risks and in the management of the processes implemented to rectify the problem
- recognising the diversity of Aboriginal and Torres Strait Islander communities
- a highly flexible approach with relevant information available in ways that suit the community
- making a commitment to feed the results of the project to the community
- setting time lines that suit communities needs rather than those of government or organisations.

In New South Wales, the Roads and Traffic Authority (RTA) funded an evaluation of Aboriginal Community Patrols (see Table 3 under 'Pedestrians'). Community Patrols are undertaken by local volunteers who pick up 'people at risk' including those who may be affected by alcohol or drugs, from public places and accompany or transport them to a safe place. Patrols reflect the principle that communities can often provide solutions to local problems (Attorney General's Department of New South Wales 2003). Guidelines for establishing community patrols are available on the Internet (www.lawlink.nsw.gov.au/cpd) or on CD-ROM.

7.6 Knowledge transfer

Internet and related technologies provide an effective mechanism for the delivery of information to rural communities with limited resources and lower levels of socio-political efficacy. One such resource is 'The Community, Action Planning and Information Resource' (CAPIR) developed by Queensland Health (2000). The CAPIR CD-ROM (also available online at <http://www.health.qld.gov.au/capir/>) targets the social determinants of health (equity and access) and helps communities to identify available individual capital, barriers, and facilitators to change. Originally designed to address broader community health issues, the CAPIR is not content-specific and walks users through the process to achieve change: *Reflecting* →

Interpreting → Deciding → Acting → Evaluating. Early feedback suggested that the package is 'user friendly' and culturally appropriate for both rural and indigenous populations.

As indigenous communities adopt interventions, the need for a mechanism of knowledge transfer to promote improvements in the programs adopted and to minimise duplication becomes greater. To this end, the ATSB, Western Australia, South Australia, Northern Territory, Queensland and New South Wales provided funding for the *HealthInfoNet Indigenous Road Safety Website* (Hawkes 2004). The Internet based resource is aimed at increasing awareness of existing information pertaining to indigenous road safety and of relevant projects and will take the form of a website. Indigenous communities, community groups, policy makers, program managers, health care providers, researchers, teachers, students and the general community can access the website to obtain:

- information about road safety organisations, agencies and individuals
- reviews of road safety issues and indigenous Health
- details of news and events
- a bibliography of relevant documents
- a list of and links to relevant resources
- information on relevant road safety projects, including community projects and international projects
- grant details
- training program details
- a guestbook.

The website was launched in December 2005 and can be accessed at <http://www.healthinfonet.ecu.edu.au/frames.htm>. Further details on the *HealthInfoNet Indigenous Road Safety Website* are presented in Section 5.3 of Appendix C.

7.7 Legislation addressing riding in open load spaces

As mentioned in Section 3.2.3, riding in the open load-space (OLS) of vehicles is a major problem for indigenous populations. In response, the Northern Territory passed legislation in 1994 to prohibit such behaviour in all vehicles not fitted with a prescribed roll-frame. Garrow (1999 p. 108) reported that since the reforms '*... all of the deaths and all but one of the serious injuries to OLS passengers ... occurred in vehicles not fitted with prescribed roll-frames.*' Since the 1st of January 2003, traveling in open load space has not been permitted whether the vehicle is fitted with an approved load space enclosure or not.

More recently, Western Australia passed a regulation banning people from travelling in the open load-space of a vehicle. Since 1 January 2001, carrying people in the open load-space of vehicles has been permitted only if the vehicle has an approved roll-over protection device fitted. Roll-over protection devices have not been approved since 1 January 2004, and all open load-space travel will be prohibited from 1 January 2006 (Office of Road Safety 2004). In relation to the outcomes of the Western Australian regulations Cameron (2003) reports that:

'While definitive results are yet to be obtained, preliminary monitoring of Police fatal crash reports by the Office of Road Safety for 2001, 2002 and 2003 (to date) indicate that a total of three deaths have occurred as a result of crash with passengers travelling in the open load space of vehicle compared to the previous pattern of six to eight deaths per year. If these estimates are proven, the Open Load Space initiative will have potentially saved a total of between 15 and 21 lives over the past three years.'

Queensland Transport followed the lead of the Northern Territory and Western Australia and introduced legislation to prohibit travel in the open load space of vehicles. All open load travel has been prohibited since 2002. Based on the Northern Territory and Western Australian experiences, there is evidence to suggest that restrictive legislation, coupled with enforcement, has the potential to greatly reduce the number of injuries sustained by open load space passengers. Indeed, the South Australian Road Safety Advisory Council (2003 p. 6) put forward as a possible initiative:

'Legislate to make it illegal for any person to ever travel un-restrained in a vehicle (with minimal exemptions for people who need to continuously get in and out of vehicles eg, those making door-to-door deliveries and for other vehicles such as metropolitan buses).'

Investigation of available crash/fatality data should enable other jurisdictions to determine the potential for legislating against riding in open load spaces to reduce Indigenous road crash casualties.

7.8 Accessible licensing and training systems for offenders and remote populations

Unlicensed driving is often associated with a lack of knowledge and training in road rules and safe driving. Somssich (2004 p. 20-21) outlines some of the major problems associated with driver training and education among indigenous communities:

'Driver training in communities was virtually non-existent, extremely expensive and culturally inappropriate, so for most it just didn't happen causing many to drive without licences.'

'Because most programs were developed for mainstream, communities had no ownership or relativeness to the programs.'

'Road safety was a sleeping issue and something that was accepted as a way of life if you travelled.'

'Licensing was difficult as some remote communities have no police or licensing agencies.'

'Most communities don't have garages or facilities where members can take their vehicle to be fixed for registration thus many drive unroadworthy, unregistered vehicles.'

'Alcohol consumption and anti social behaviour contributes substantially to crashes and the list goes on.'

Edmonston et al. (2003) reported on the 'problem identification' phase of a four year project aimed at increasing indigenous licensing and retention rates. Interviews and focus groups with Queensland indigenous communities, indigenous persons serving prison sentences for driving offences and stakeholder groups were used to identify issues related to licence training and testing and performance maintenance. A subset of the many issues and potential solutions identified is presented below.

Table 4: Licensing issues and potential solutions (adapted from Edmonston et al. 2003)

Issue	Potential Solution
Fear of dealing with licensing staff ('bully men')	Utilise indigenous Officers or community police instead
Literacy problems	Have licence tests administered by someone fluent in local languages and make the test more pictorial
Inclusion of unfamiliar city concepts in the test	Develop and promote community awareness about visual aids to teach students about urban driving issues
Difficulties with proof of identity	Queensland Police staff in smaller communities often contact persons approaching licensing age to assist them in applying for a birth certificate
No infrastructure for training and testing drivers	Develop training tracks
Enforcement of unlicensed driving is inconsistent	Increase involvement of community police officers and provide databases of those disqualified for such offences

7.9 Increased road safety knowledge and training

The Department of Health and Ageing's Draft National Injury Prevention Plan: 2004 (Strategic Injury Prevention Partnership, 2004, p. 15) suggest that the following action should be taken in order to reduce injuries among indigenous communities:

'Increase knowledge of, commitment to, and skills in injury prevention in both ATSI communities and in non-indigenous workforce.'

Cercarelli et al. (2000) interviewed the Chairpersons of the 13 largest indigenous communities in remote Western Australia (Fitzroy Valley region) to examine attitudes to road safety problems and priorities for change. Interestingly, the interviewees identified poor road conditions as a far more important problem than high-risk behaviours, such as drink driving, speeding, riding in open load space and inadequate seatbelt use. This demonstrates the need for greater road safety awareness-raising in indigenous communities. With increased knowledge of the relevant issues, will inevitably come a greater involvement and empowerment of indigenous stakeholders in relation to road safety decision-making processes.

One way to increase knowledge of road safety in indigenous communities is to have more indigenous people in road safety-related positions. The following initiatives all have the potential to facilitate this.

- The RTA's Aboriginal Action Plan 2001 – 2006 (RTA 2001) commits the RTA to improving Aboriginal employment, career development and retention rates and to creating employment options for Aboriginal people in areas across the RTA, including road safety.
- CARRS-Q, in conjunction with the Queensland University of Technology School of Psychology and Counselling, and School of Civil Engineering, offers a Graduate Diploma and Graduate Certificate in Road Safety. The entry requirements of these courses are based on previous experience and not academic history. These courses are available via

distance education, which should also ensure their accessibility to indigenous populations in rural and remote areas.

- The Queensland Police Justice Entry Traineeship (Certificate IV in Justice - Aboriginal Peoples and Torres Strait Islander Peoples) is a program designed to provide opportunities for Aboriginal and Torres Strait Islander people to become officers in the Queensland Police Service (Queensland Police Service 2004).

Tziotis, Mabbott, Edmonston, Sheehan and Dwyer' (2005) report entitled *Road safety in rural and remote areas of Australia* describes a recent review of what is known about road safety in rural and remote areas. The scope of the Austroads review was much broader than that of the present review because it examined strategies of potential benefit to both indigenous and non-indigenous populations. For example, it covered the potential of innovative strategies utilising; community engagement and capacity building, targeted education, enforcement regimes, vehicle design and infrastructure management, intelligent transport systems and emergency trauma systems to increase road safety.

One of the recommendations put forward by Tziotis et al. (2005 p. 101) was 'a review of policing activities with the view to broadening the role of indigenous community police'. A starting point for this process is the provision of road safety knowledge and training to more indigenous communities.

8 Summary

A literature review, crash data analysis and consultations were carried out in order to provide information on the nature of road safety issues facing indigenous communities in Australia. The information collected was brought together in order to produce guidelines on research and intervention priority areas.

The literature review revealed that despite considerable limitations in the quality and availability of road crash data for indigenous Australians, some of the major road safety issues facing indigenous Australians include:

- non-use of restraints, vehicle overcrowding and travelling in open load space
- misuse of alcohol – for pedestrians and drivers
- unlicensed driving
- road quality
- vehicle quality
- remoteness of crash locations.

Crash data from Australia, the Northern Territory, Queensland and Western Australia highlighted the high number of indigenous passengers and pedestrians injured in crashes and the considerable proportion of crashes that involved a single vehicle. The involvement of alcohol and non-use of restraints was also highlighted, as was the increased propensity for crashes on rural roads to be fatal.

Consultations with representatives of Australian and overseas jurisdictions revealed a general consensus that work to improve the availability and quality of indigenous crash data would be valuable. Although little current or proposed research was identified, many road safety programs aimed at improving aspects of indigenous road safety were highlighted. Programs aimed at improving licensing rates predominated but general road safety programs, and programs addressing community development, alcohol use, restraint use and vehicle maintenance were also identified.

A brief overview of indigenous road safety practice in the United States and New Zealand revealed an emphasis on community development projects. Canada's initiatives appear to be at a relatively early stage of development.

Relevant literature and information gathered during the consultations were used to guide the development of several recommendations for future research and interventions. These, and some additional recommendations arising directly from the literature review or consultations are presented in the summary at the beginning of this report.

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Appendix A - Consultation survey

NAME:

ORGANISATION/AGENCY:

Note – Please type answer in the box provided under each question

- 1. What is the role of your agency/organisation with regard to indigenous issues, and more specifically indigenous road safety issues?**

- 2. How is indigenous crash data classified and recorded in your jurisdiction?**

a) Is it adequate for your purposes? ...

b) Is ethnicity recorded (and if, so, how is it recorded)? ...

c) Is health or hospital data consistent with transport data? ...

d) Is it consistent with data collected and recorded in other jurisdictions? ...

e) Suggested improvements ...

- 3. What are the key road safety issues for indigenous people in your jurisdiction, as you see it? (ie. What are the major causes of road crashes involving indigenous people?)**

- 4. What road safety programs, if any, are in place (past, present and future) to address these and/or other road safety issues? (Feel free to identify more than one program/initiative)**

a) Discuss the program's objectives and other details ...

b) Discuss the implementation process (delivery style, content, target audience, cost/funding etc.) ...

c) Discuss any formal or informal evaluations of the program ...

5. What indigenous road safety research has been/is being undertaken, or future research planned, by your agency/organisation?

6. Can you identify any gaps in the research that you believe should be addressed by future research?

7. Are you aware of any other promising indigenous road safety initiatives (offered by another agency)?

8. Can you identify anyone else in your jurisdiction that should be involved in this review?

9. Any other comments/suggestions?

☺ THANK YOU FOR YOUR PARTICIPATION ☺

Appendix B - Consultation contacts

	Name	Title/Position & Agency	Participation Status
Queensland	Mr Noel Rumble	Regional Manager (Northern Region), QT	Contributed to Queensland Transport's online survey response
	Mr Bruce Robertson	Assistant Manager (Northern Region), QT	Personal consultation and contributed to Queensland Transport's online survey response
	Ms Deborah Avery	Senior Adviser, indigenous Road Safety (Northern Region), QT	Personal consultation and contributed to Queensland Transport's online survey response
	Inspector John Fox	OIC Cultural Advisory Unit, Queensland Police Service	Personal consultation and online survey completed
	Senior Sergeant Allan Pryde	Coordinator of Remote Licensing Program, Cultural Advisory Unit, Queensland Police Service	Personal consultation and online survey completed
	Mr Norm Clarke	Indigenous Liaison Officer (Kanolu), Queensland Fire and Rescue Service	Phone consultation and online survey completed
	Mr Colin Edmonston	Senior Research Officer, CARRS-Q	Developed online survey, identified stakeholders, conducted all phone consultations, collated results by topic area and jurisdiction, and added to Queensland responses
South Australia	Dr Trevor Bailey	Senior Project Officer, Safety Strategy, Department of Transport and Urban Planning	Phone consultation and online survey completed
	Inspector John Venditto	Traffic Support Branch, SA Police	Phone consultation completed
Northern Territory	Ms Eve Somssich	Manager, Driver Education and Training Unit, Charles Darwin University	Phone consultation and online survey completed
	Ms Pam Palmer	Manager, Department of Infrastructure, Planning and Environment	Phone consultation and online survey completed
	Mr Michael Mills	Aboriginal Road Safety Officer, Department of Infrastructure, Planning and Environment	Phone consultation and online survey completed
	Mr John Bennett	Chief Executive Officer, Willowra Community	Completed online survey

	Name	Title/Position & Agency	Participation Status
New South Wales	Ms Annamarie Reisch	Manager, Population Health Division, Department of Health and Aging	Completed online survey
	Mr George Shearer	Aboriginal Programs Manager & Aboriginal Road Safety Coordinator, Roads and Traffic Authority	Phone consultation completed
	Ms Lee Towney	Project Officer, Crime Prevention Division, Attorney Generals Department	Phone consultation and online survey completed
	Mr Ian Faulks	Committee Manager, STAYSAFE Committee	Phone consultation completed
	Dr Kathleen Clapham	Senior Research Fellow, Injury Prevention and Trauma Care Division, The George Institute for International Health	Phone consultation and online survey completed
Victoria	Mr Peter Frauenfelder	Road Safety Department, VICROADS	Phone interview completed
	Ms Karen Milward	Director, Planning & Development, Aboriginal Affairs Victoria	Phone interview completed
	Senior Sergeant Nick Finnegan	Road Safety & Awareness Section, Aboriginal Advisory Unit, Victoria Police	Phone consultation completed

	Name	Title/Position & Agency	Participation Status
Western Australia	Dr Emma Hawkes	Office of Road Safety, Department of Premier and Cabinet	Phone consultation and online survey completed
	Mr Kevin Pettingill	Executive Manager, Technical Services and Development Services Shire of Derby/West Kimberley	Phone consultation and online survey completed
	Mr Tuesday Lockyer	Aboriginal Liaison Officer, Roebourne Police Station	Completed online survey with Tracey Heimberger
	Ms Tracey Heimberger	Operations Manager, Mawarnkarra Health Service Aboriginal Corporation	Completed online survey with Tuesday Lockyer
	Sergeant Laurie Stubbs	District Traffic Coordinator, Kimberley, WA Police	Phone consultation and online survey completed
	Senior Constable Hughie Tollan	Police Safety Section, WA Police	Phone consultation completed
	Dr Rina Cercarelli	Injury Research Centre, School of Population Health, The University of Western Australia	Consulted with WA Transport Department to contribute to their submission
	Professor Neil Thomson	Director, Aboriginal and Torres Strait Islander Health/ <i>InfoNet</i>	Personal consultation and provided additional information
Tasmania	Ms Fiona Cleary	Land Transport and Safety, Department of Infrastructure, Energy & Resources	Phone consultation completed
	Constable Russell Barrett	Aboriginal Liaison Officer, Community Policing Section, Tasmania Police	Phone consultation completed
	Ms Sandra Lovell	Crime Prevention & Community Safety Council	Phone interview completed

	Name	Title/Position & Agency	Participation Status
International	Mr Roger Maxwell	Community Programme Manager, Maori and Pacific Peoples Safety, Land Transport NZ	Phone consultation and completed online survey
	Professor Richard Tay	Professor in Road Safety, Department of Civil Engineering, University of Calgary	Phone consultation completed
	Dr Wadieh Yacoub	First Nation People Programme Officer, Health Canada	Consultation completed via email correspondence
	Ms Loise Hayes	Alberta Aboriginal Affairs and Northern Development	Consultation completed via email correspondence
	Dr Jay Shore	American Indian and Alaska Native Programs	Phone consultation completed

Appendix C – Consultation findings

1 QUEENSLAND PERSPECTIVE

1.1 Strategic approach to Indigenous road safety

Queensland's Road Safety Action Plan 2004-2005 has a vision of *Safe4Life*, a belief that all road users should be able to travel safely anywhere, anytime. QT's approach to road safety is based on four key outcomes:

1. Safe attitudes and behaviours, and optimal health outcomes in the event of a crash.
2. Safe roads, safe road environments and safe management of traffic.
3. Safe vehicles that reduce injury severity and maximise crash avoidance.
4. A community that values road safety as a priority.

One key at-risk group of people in rural and remote areas are indigenous road users. Indigenous road safety in Queensland is primarily addressed by QT (Land Transport & Safety Section) and the Cultural Advisory Unit of Queensland Police Service, with the support of a number of other government and indigenous agencies. Given that about 94% of indigenous people who reside in the remote communities in Queensland live in the Northern Region, the Northern Region's local Road Safety Action Plan has a strong indigenous focus. *"It outlines specific interventions for Indigenous road users ... Driving under the influence of alcohol and/or drugs is a key issue. Travelling unbuckled and unlicensed driving are major at-risk behaviours that impact substantially on Indigenous road users in Queensland"* (Queensland Transport submission, 2005). A copy of the Action Plan can be found at:

[http://www.roadsafety.qld.gov.au/qt/LTASinfo.nsf/ReferenceLookup/Action_Plan_2004.pdf/\\$file/Action_Plan_2004.pdf](http://www.roadsafety.qld.gov.au/qt/LTASinfo.nsf/ReferenceLookup/Action_Plan_2004.pdf/$file/Action_Plan_2004.pdf)

1.2 Data quality and crash causal factors

While Queensland Police Service record indigenous status based on 'racial appearance', stakeholders recognise that indigenous peoples are not always accurately or consistently identified in collections due to variations in definitions of Aboriginality and rurality, different data collection methods, failure to record Indigenous status, and so on. *"Across government, different agencies have different definitions for geographical dispersion, age profiles, racial characteristics and socio-economic status. It is important to remember that any data presented is influenced by the standard/variation of data collection methods ... The method and level of identification of Indigenous peoples appears to vary across jurisdictions. Further, surveys do not necessarily include an Indigenous identifier; where they do, they may not provide for sufficient sampling to allow any degree of confidence. It should also be noted that some Indigenous peoples do not identify as such during data collection. In other cases, the numbers are sometimes so small they cannot be published for privacy reasons"* (Queensland Transport submission, 2005).

Routinely collected statistics tend to underestimate the size of the injury problem among indigenous populations. Ethnicity has only been recorded in road crash data records since 2000. To further complicate matters, where crashes occur on non-public access or private roads, they are not recorded in official statistics – the extent of crashes in remote locations is therefore unknown. Further, administrative data collections (eg. licensing and registration) do not distinguish ethnicity.

Health and transport data are not aligned. Health and hospital separation data in Queensland has, until recently, essentially been Anglo-centric. Queensland Health recently consolidated a set of indicators of the major determinants of health which further strengthen the evidence base and assist with identifying priority areas for practical interventions where investments to improve the health of Indigenous Queenslanders can be made.

Accurate quantification is difficult due to two main reasons. One being the difficulties surrounding the identification of Indigenous peoples and the other being poor reporting of road crash events and investigations including Coronial reports. Exploration of the data appears to be consistent, however, there is a need to reflect upon the 'underlying causes' – the social and cultural factors.

Given the complications with data, the major road safety problems facing Aboriginal and Torres Strait Islander people in Queensland are: unlicensed driving; driving under the influence of alcohol/drugs; and non-compliance with restraint/overloading legislation.

1.3 Road safety initiatives and programs

The major contributing factor to the overall success of sustainable road safety education is community ownership. Community-managed road safety programs are the long-term goal in Queensland, so all planning processes are inclusive of community members to ensure that proposed interventions are acceptable to the community and thus more effective. Key issues that Queensland stakeholders are working through with communities include:

- lack of knowledge and access to obtain and maintain a driver's licence
- lack of knowledge regarding the safety standards required for vehicles
- lack of transport infrastructure
- lack of opportunity to identify and prioritise local safety issues and communicate that information
- lack of awareness of local road safety issues and suitable programs available.

Given that many remote communities do not have adequate access to licensing and emergency services, improvements to the accessibility of these services has become the road safety priority in Queensland (as evidenced by the many driver education and licensing programs discussed below).

1.1.1 Safe-4-Life Licensing Project for Aboriginal and Torres Strait Islander People

The Safe-4-Life Driver Licensing Project for Aboriginal People and Torres Strait Islander People is Queensland's flagship program. The provision of accessible and appropriately-delivered driver education and licensing systems for Indigenous communities was identified as the immediate priority in the national review of Indigenous road safety (ATSB, 2003). According to the National Crime Prevention Branch (2000), unlicensed driving offences greatly contribute to Indigenous Australians being over-represented in incarceration figures by fifteen-fold. In Queensland [as at March 2000], the rate of Indigenous imprisonment was nearly 12 times that of the non-Indigenous rate and in more than half of these cases the index offence was unlicensed driving or drink driving (National Crime Prevention Branch, 2000).

In response to an overwhelming need identified by Indigenous communities throughout Queensland and the Torres Strait, CARRS-Q, Queensland Transport and Queensland Police Service embarked on the Safe-4-Life Driver Licensing Project. In addition to individual community councils and justice groups, the project is supported by both the Islander Coordinating Council (ICC) and former Aboriginal Coordinating Council (ACC). Further, the project now boasts 'whole-of-government' support and, over the next three years, the united Queensland Government is committed to identifying, developing and implementing a number of programs and policies to maximise Indigenous involvement in the driver licensing system and reduce the number of Indigenous people incarcerated for licence-related offences.

The first phase of the project involved a year-long research and consultation process to better understand the cultural, access and procedural barriers impacting on the capacity of Indigenous people in Queensland to obtain and retain appropriate driver's licences. Information was obtained through: (1) focus groups in 13 Indigenous communities throughout Queensland and the Torres Strait and attendance at special cultural events [community perspective]; (2) semi-structured interviews with 60 Indigenous persons serving sentences for driver licensing offences in Queensland correctional facilities [offender perspective]; and (3) a series of interagency forums with government and key Indigenous and non-Indigenous stakeholder groups [government perspective].

Some of the barriers and problems raised by communities were:

- **Cultural and historical issues** including: fear of police or "bollimen" due to past experiences; lack of Indigenous people employed in transport or police professions; lack of cross-cultural awareness among educators, trainers and testers; and that governing bodies (both agency and community) and funding bodies do not see licensing as a priority – rarely identified in regional training plans.
- **Testing issues** including: a written test which is mostly "urban" and contains many concepts foreign to remote communities and Indigenous language and does not include issues relevant to remote driving conditions.
- **Information, education and training needs** including: a lack of 4WD training in communities; lack of information on learner's restrictions, in particular the accompaniment rule, lack of school-based road safety and licensing programs for young Indigenous students as they often return to communities as future leaders; lack of promotional material and media campaigns designed to raise community awareness about road safety and the importance of being licensed; lack of information available on vehicle roadworthiness and a lack of roadworthy vehicles in communities to conduct licensing training or testing.
- **Justice issues** including: the high incidence of Indigenous people incarcerated for a licensing offence, having never been part of the licensing system; lack of information regarding licensing restrictions, fines, penalties and sanctions and a widespread perception that loss of licence is always indefinite; lack of training opportunities for short-term inmates; and that revenue generated from fines and fees is lost from the community and not redirected back into programs.
- **Cost and access issues** including: a lack of training visits to communities and minimal provision for mobile training centres; and the high cost associated with travelling to be tested for and renew licences.

Since the research phase, the inter-sectoral project team established five specific task groups responsible for the delivery of outcomes. The objectives of the task groups are listed below and action plans to achieve these objectives have been developed.

Evidence of Identity (Leaders: Cathy McCahon & Warren Anderson)

- Implement approved evidence of identity requirements that meet the National Standards and are able to be met by the majority of Aboriginal people and Torres Strait Islander people
- ensure client groups (Aboriginal people and Torres Strait Islander people, service providers, training bodies) understand all aspects of evidence of identity requirements.

Learners licence user-friendly learning and testing materials (Leader: Warren Anderson)

- Implement an approved learner licence test that is readily understood and more accessible to Aboriginal people and Torres Strait Islander people
-

- produce and distribute learners licence materials which are readily understood by Aboriginal people and Torres Strait Islander people.

Program delivery instruction & testing (Leaders: John Fox & Alan Pryde)

- Implement a preferred model/s for practical driver instruction which provides greater access for Aboriginal people and Torres Strait Islander people
- implement a preferred model/s for practical driver testing which provides greater access for Aboriginal people and Torres Strait Islander people.

Education and training (Leader: Malcolm Vick)

- Implement resource efficient and effective methods for delivering learner and driver licensing training which are both readily understood and easily accessible for Aboriginal people and Torres Strait Islander people
- implement programs which effectively educate Aboriginal and Torres Strait Islander licensed drivers in order to improve license retention levels
- identify, evaluate and endorse a suite of licensing programs/resources suitable for operation in various parts of the State (some of which are listed below in this section).

Court diversion (Leader: Cathy McCahon)

- Improve availability of effective diversionary programs that the justice system can use for Aboriginal people and Torres Strait Islander people with driver's licence related offences
- ensure the justice system is better informed and aware of programs available for Aboriginal people and Torres Strait Islander people with driver's licence related offences.

Since the consultation process, progress has been made on all of the above objectives. In addition to above task groups, the project team recognises the need for independent evaluation. As such, CARRS-Q has drafted a comprehensive process and impact evaluation framework for the project (in its entirety) that enables ongoing time-repeat comparisons using a variety of performance indicators. The evaluation framework not only examines outcome performance measures (i.e. offence rates, licensing rates, injury rates, community and custodial service orders), but also the degree to which the program aligns with proven principles for community crime prevention in Indigenous communities.

The project supports a geographical scope that has extended beyond the initial focus on Deeds Of Grant In Trust (DOGIT) communities and Aboriginal and Torres Strait Islander Council communities, to now include all remote communities with a majority of Indigenous people, as well as Yarrabah and rural and urban locations which have large Indigenous populations.

1.1.2 The Mobile Licence Testing Service for Remote Areas

Program aims

The *Mobile Licence Testing Service for Remote Areas* is an integral part of the whole-of-state Safe-4-Life Project. While Queensland Transport is ultimately responsible for the delivery and testing of licences in Queensland, the Queensland Police Service have been contracted to provide driver licensing education programs and testing (both theoretical and practical) to isolated and remote areas and Indigenous communities. This service has been ably delivered by the Cultural Advisory Unit (Senior Sergeant Alan Pryde) and colleagues for many years, during which time the unit has developed good rapport with community councils throughout the Cape, Gulf and Torres Strait.

Components and delivery style

Community visits by the unit to undertake licensing training and testing are generally scheduled on a needs basis and requested by specific communities or clusters of communities. For example, following a successful trial on MER Island in the Torres Strait in November 2001, the Assistant Chief Executive Officer of Darnley Island Community Council sought assistance to overcome an immediate problem concerning the licence status of council employees. She advised that an audit revealed only two out of over twenty employees held current licences for the class of vehicles they are required to drive as part of their employment contracts. The majority of these employees require either medium rigid, heavy rigid or heavy combination licences. She advised that there were a number of other persons on the island also requiring driver's licences for their particular employment.

Due to the excessive cost of flying to Thursday Island to obtain a driver's licence (up to \$800 return) and the extreme community interest expressed, it was deemed more cost-effective for the service providers (Queensland Transport and Queensland Police Service) to travel to Darnley Island and test/issue licences on site. This situation is not uncommon in Indigenous communities throughout Australia and provides further rationale for initiatives that provide licences more quickly, conveniently and at a lower cost than can be achieved by other means.

In the initial pilot, Queensland Police Service provided an officer authorised to perform licence tests for a variety of licence classes, while Queensland Transport supplied two Administration Officers (from Cairns), the photographic equipment, licensing data cards and associated administrative requirements to complete the project. Over 83 licensing transactions were completed in block mode within a week period.

The evolved program now offered by the Cultural Advisory Unit adopts a teaching approach that is very suited to Indigenous learning styles (i.e. very practical and group-oriented). Firstly, candidates wanting to go for a written learner's test work through the road rules, give way and signage requirements very slowly (can take up to six hours training) as a group. Concepts are explained over and over again and shown repeatedly using toy cars and mock intersections. Simple and appropriate language is used and, if a person is struggling to understand the concept/question, there is flexibility to use another member of the group from the community to explain it in a different way using local language. The success factors underpinning the program are:

- patience (it takes time to learn these very foreign concepts)
 - repetition (learning by doing over and over again)
 - practical demonstration (not reliant on reading/language skills)
 - six-monthly visits to align with licensing stages/renewals and cultural events (eg. All Blacks Footy Carnival) to counter cost and access issues
 - using local content (local people, local situations) and local trainers (community police) to increase message acceptance
 - group interaction (train the trainers model)
 - modifications to the test language and process to ensure cultural sensitivity
 - modifications to the proof of identity process (allowing local Elders and councillors to vouch for a person's identity)
 - walking students through the full licensing process and learner restrictions
-

- above all, a relaxed environment (even to the extent that officers delivering the program do not wear police uniforms which might invoke fear).

The training contains a strong safety focus, even more so than urban programs. Core messages associated with the program include:

- 'The 'be careful' at all signs rule!'
- 'Stop for smoko every two hours' - FATIGUE
- 'No grog if you're driving the mob' - ALCOHOL
- 'It's deadly (not deadly) to ride in the back of utes' – RESTRAINTS
- 'Always stop for pedestrians' ... 'Don't sleep on the road'
- 'Check everything - the engine, fuel, oil, tyres, mirrors, lights, etc.'

Once deemed ready for the test, the class sits the test as a group but are required to answer individually. Once again, the questions are read aloud and students are given the opportunity to use the cars and resources used earlier to work through problems for themselves.

The Cultural Advisory Unit, particularly Senior Sergeant Pryde, has extensive practical licence testing experience in all licence classes and types. Therefore, they are able to personally conduct the tests, then upon returning to the mainland or the nearest police office can process the associated documentation. This can be a time-consuming process. Senior Sergeant Pryde is seen as an independent person who is particularly important in the present political climate of the Torres Strait and mainland Indigenous communities. So when people fail, he is able to deal with concerns on a more independent footing. He is well known to the community councils due to his ongoing input on traffic-related issues throughout the Torres Strait and is the police representative on the Q-Safe Committee.

Program status

The program has gained momentum and, as such, has been subsumed by the Cultural Advisory Unit (formerly with the State Traffic Support Section of Queensland Police Service) to ensure that it gets the departmental support to ensure its continuance. Since the Darnley Island pilot, the Cultural Advisory Unit has conducted training programs in almost all Indigenous communities in Queensland.

The program has also recently recruited an Indigenous female officer who also travels to communities, thus overcoming a cultural barrier and giving female drivers the opportunity to train with another woman.

Implementation barriers / cost issues

Due to the personal cost and access issues facing people in remote areas, at this stage there appears to be little alternative to mobile programs that take the licensing process to communities. Ideally, down the track the Cultural Advisory Unit would like licensing to be administered locally as a community function. However, until communities have the expertise and support structures in place to do this, a visiting service must be available. According to the unit and communities, the licensing of Indigenous people through visiting services reduces the number of people incarcerated for traffic offences.

Evaluation

While the program has not undergone a formal evaluation, the Cultural Advisory Unit has kept detailed records of community visits and the licensing transactions undertaken. The fact that the program is successfully able to increase licensing and the demand for visits registered by communities provides strong evidence for the continuation of this service to meet both social justice and road safety objectives.

1.1.3 Western Cape College All Age Driver Education Program

Program aims

Queensland Transport has been developing working partnerships and relationships with the Napranum and other Western Cape communities for some time through an initiative to improve road safety – the *Western Cape College All Age Driver Education Program*. This program is coordinated by Mr Steve Head (a driver trainer based at the College). The initiative aims to increase levels of licensed drivers in the community and therefore to decrease the levels of Indigenous incarceration for licensing offences. Communities have identified this driver training as a high priority. The initial project targets Western Cape communities (Napranum and Old Mapoon), however, it is hoped that it can be expanded to include all Cape communities.

For many years one of the barriers to improving employment opportunities for young adults from the Western Cape area has been the lack of opportunity to gain access to driver training. Successfully acquiring the knowledge and skills, not only to become a competent driver of a passenger vehicle but also an operator of a heavy rigid vehicle can provide that leading edge in seeking employment. A large group of people of all ages across the Western Cape (including those attending the College) have registered to undertake the comprehensive driver education program.

Components and delivery style

A program has been designed that meets the needs of the large range of ability levels, focusing on the literacy requirements necessary to pass the learner's test, to developing the practical skills of defensive driving. There is a minimum 15-hour tuition period, which culminates in a written road rules test. This is conducted in partnership with the Weipa Police Department and is conducted at Western Cape College (in the case of students) by a plain clothes officer to attempt to reduce the negative connotations associated with the police station. Like other successful programs, the Western Cape model uses a group learning and group testing approach. The teaching style is very much demonstrative, where students will work through traffic situations through role-playing. Student A might be Car A, while student B might be Car B and right of way rules will be worked through.

Western Cape College teachers have obtained driver trainer accreditation in order to provide this training identified by communities as a high priority. Current legislation does not allow anybody other than Queensland Police or Queensland Transport officers to assess students for the issue of a licence (other than competency based Q-Ride for Motorbikes). The college is keen to perform this task and is working with Queensland Transport to explore ways of obtaining approval to conduct assessments. The Western Cape College is also about to embark on a full driver education program involving road safety education for students from year 1 through to year 12.

In addition, there is an intention to extend instruction to include training in: (a) medium rigid (trucks & buses); (b) motorcycles; and (c) 4WD defensive driving. There is also a proposal to include examination assessment in the project. The project has been developed in conjunction with a number of organisations including Queensland Transport, Police Services, TAFE, DEET and Local Councils.

Program status

Over a six-month period, 77 students successfully gained a learner driver certificate and of those, 14 have gone on to gain their P Licence. At present, the remaining 63 are engaged in training in practical skills and putting an additional 15 people through their learners. In 2004, the program was offered to the nearby community of Aurukun. The College has provided the key resource of the trainer and has been strongly supported by TAFE in supplying the training vehicle. Queensland Transport has also been instrumental in supporting the program by coaching trainers in course delivery. Currently, negotiations with Department of Main Roads are looking at the possibility of basing an 11 tonne truck at Weipa so locals can gain their rigid truck licence.

Implementation barriers / cost issues

The initial difficulty experienced was gaining access to a suitable vehicle for training and testing. This problem was rectified when TAFE supplied a vehicle. Some of the cost of the trainer's time is paid for through Community Development Employment Program training funds, while the remainder is provided in-kind by the College.

Evaluation

The program is in its infancy and as such has not been subject to evaluation. However, Mr Head has developed an excellent rapport with the communities involved and offers a program that adopts a style suitable to Indigenous learning (i.e. group training and testing and *"doing rather than telling"*). The research team (as part of the Safe-4-Life review) watched both a training and testing session first-hand, and of the eight students to sit the theory test, seven passed. Mr Head advocates community-based testing to reduce the "shame" caused by approaching the police station to obtain a licence.

1.1.4 Learner's Licence Training Project and Low Literacy Test

Program aims

The project commenced in 1996 when QT Road Safety Section (South West Region) were asked by the Cherbourg and Cunnamulla communities to help local Indigenous people who had been unable to pass the written learner's licence test. People were deemed to be failing because *"...they did not have the adequate literacy skills to learn the materials (in available text format) to pass the test"* (Queensland Transport submission, 2005). In response, Queensland Transport, in partnership with community members and interested agencies, developed several resources designed to increase comprehension of the licensing questions.

Components and delivery style

By 1999, the project team had developed a resource kit that consisted of three training activities suitable for peer-based group learning that dove-tailed with the knowledge required to pass the written test. These prototype resources were then critiqued by a reference group to ensure that the end products were aligned with community and agency needs. It was apparent that *"the learning resources needed to have a clear and unambiguous connection with the test process to maximise learning from the materials and ensure the test's integrity"* (Queensland Transport submission, 2005). The reference group included staff from special education units, youth justice programs, a correctional centre, youth employment agencies, neighbourhood centres, transport staff and, most importantly, Indigenous community members.

Because the roots of the project stem from the Aboriginal community of Cherbourg (whose members developed many of the resources), the program capitalised on the strengths of group

learning which is regarded by those consulted from a number of jurisdictions to be particularly effective in Indigenous communities (best practice). This learning style facilitates discussion and helps to reduce possible “shame” caused by low literacy skills, incorrect answers and/or communication difficulties. This approach allowed for an external facilitator. In addition, group testing (in the community) has been used to reduce the negative impact that other testing venues can generate. The group learning and group testing approach is also utilised by the Gordonvale and Western Cape College programs and is regarded by communities as highly successful.

Program status

In 2000, the resources reached a stage where they could be circulated on CD ROM and by the end of 2001 more than 200 people had passed the written test after going through the program. Overall, approximately 500 tests had been undertaken, but this includes some people required to repeat the process.

Implementation barriers / cost issues

The delivery of the program still relies heavily on Queensland Transport staff visiting the community, which is both costly and not conducive to the best learning outcomes because of reduced local involvement. Sustainability also requires ongoing local involvement. The importance of utilising Indigenous people in the delivery process to increase comprehension and understanding and reduce communication problems was emphasised throughout the consultation process.

Evaluation

Mr Noel Smith (Road Safety Manager, Southern Region) reported that *“the program now has over 150 registered users throughout Australia”*. However, it is recognised that the sustainability of the program will be largely dependent upon the ability of these users to tap into local Indigenous knowledge and trainers to ensure that the program is delivered in a culturally-appropriate manner. Also, the Toowoomba region is looking at revising the program in light of recommendations to further break down the language to better suit participants. There is a growing belief that the comprehension problems faced by Indigenous participants are not literacy-related, but more an issue of language. Consequently, the onus is on program developers and delivers to present concepts in a language that is fluent to the end users to maximise understanding. No formal evaluation is planned or has been conducted.

1.1.5 Townsville Correctional Facility Licensing Program

Program aims

Many Indigenous people are incarcerated for driving-related offences, in particular unlicensed driving. Time is served and when released to their communities, some of these people re-offend. As repeat offenders, they are often re-incarcerated. This project (coordinated by Ms Fiona Innes, Education Officer at Townsville Correctional Facility) is an attempt to break that cycle and aims to:

- Develop proof of identity for Indigenous inmates
 - deliver culturally-appropriate licensing and road safety training sessions having regard to literacy and numeracy problems
 - have corrective services staff conduct road rules tests to the approved standard within the prison
 - issue learner’s licenses to inmates upon release by Queensland Transport staff.
-

Components and delivery style

Low literacy traffic safety and licensing training is delivered to eligible inmates by corrections staff. There is an emphasis on action learning, with many of the concepts (eg. give way and right of way requirements) being acted out by participants (using matchbox cars and a model map of the roadway). When inmates are in position to sit for the written test, corrections staff conduct the road rules test. On completion of the written test, the test sheets are faxed through to Queensland Transport for assessment. Corrections staff forward completed applications and certified copies of identification for successful applicants, together with fees payable. Learner's licenses are produced remotely and forwarded to the prison for inclusion in the inmate's property on release.

Program status

Five inmates have been issued with a learner's license whilst incarcerated. In total, 15 inmates have participated in the program. However, due to a number of reasons, in particular memory retention problems from substance abuse, most have failed to complete or been unsuccessful. The pilot is currently on hold while the training officer is on leave, and funding is sought. The pilot has only focused on male inmates, however there are plans to introduce the program to the female section of the prison.

Implementation barriers / cost issues

The costs associated with obtaining primary identification for the inmates has been an issue, as the inmates only receive \$11 per week in amenities to pay for toiletry items. Inmates who work, get paid an additional \$2.50 per day. The introduction of the \$15.00 fee to complete the written road rules test on each occasion posed an initial concern, however this fee has been waived and is only paid upon successful completion of the test. Queensland Transport and Corrective Services are currently negotiating what funding and/or assistance is required to ensure continuation.

Evaluation:

Five inmates issued with learner's licenses but no formal evaluation completed.

1.1.6 Gordonvale State High School: Learning to Drive and Owning a Car**Program aims**

In 2003, all senior students at Gordonvale High School students had the opportunity to learn to drive a car and become competent responsible drivers, as well as the opportunity to save a deposit for their own first car. Other aims included:

- To lower the number of accidents involving novice drivers
 - to provide students living in rural and remote areas with better access to licensing services usually only provided in larger centres
 - to provide students with basic first aid training
 - to ensure students know basic car maintenance
 - to ensure students know defensive driving skills
 - to improve the general health of students
 - to enable students to develop goal setting/achievement skills
-

- to motivate students to complete secondary schooling.

Components and delivery style

The program is broken into two streams: (1) learning to drive; and (2) owning a car. Depending on the age of the student, they are able to sign up for both streams. The key components of the program include:

- CD Rom taking learners through the road rules
- Mareeba State High School Literacy Program
- RACV program "*Keys Please*" – completed in a 2 hour session by both students & parents/mentors
- four hours of theory prior to undertaking written test
- 12 practical driving lessons from driving school
- 120 hours of supervised practice with parents/mentors
- defensive driving
- basic first aid course
- basic car maintenance knowledge
- personalised savings plan to achieve \$2000 (supervised by Lifeline Cairns Region Financial Counsellors).

Program status

Gordonvale State High School Principal advised that this program did not continue in 2004. The program ran over the seven months in 2003.

Implementation barriers / cost issues

The only cost to the student is the fee for the learner's license - \$15.10. All other costs were met by the program, which relied on funding from the Gordonvale State High School, and the Federal Department of Education, Employment, and Training. This funding was for 2003 only, and has not been forthcoming for future years.

Evaluation

No formal evaluation has been completed, however, only 40 of the eligible 130 students enrolled in the program, with 36 of these 40 accessing driver training. Out of the 40 students, only 8 were Indigenous. The motivation to enrol in the program was not as high as originally anticipated. It was found that the logging of 120 supervised hours did not occur, especially once the students obtained **driver's licences**. The school paid for the defensive driving component, however, due to the need for a minimum of six participants at each course, the students were left to arrange this with the provider. This also did not occur. Despite its relatively slow uptake, the Gordonvale program is an example of immense community commitment and involvement to develop a licensing program that is delivered by the local Indigenous Police Liaison Officer (Lomas Amini).

1.1.7 Mareeba State High School Driver Awareness Program Workbook

Program aims

The Mareeba State High School project is an adaptation of Queensland Transport's *"Your Keys to Driving"* booklet. The program has been titled the *Driver Awareness Program Workbook* and was developed by the staff of the special education unit at Mareeba State High School. The project aims to give students the preparation necessary for them to successfully sit for their learner's theory test. The program is specifically for students with literacy difficulties who are old enough to sit for their theory test (i.e. 16 years and 6 months). Students can be younger than this, but in their experience, they are not motivated to learn this information until they are aiming to get their licence.

Components and delivery style

The information is presented as an A4 size workbook which has plastic binding. Each page has been prepared so that it has large text with a lot of white space so that people with literacy difficulties can cope with the amount of text on each page. It has clip art throughout to break up the text. Vocabulary specific to each section is in a text box at the top of relevant pages. Language used in *"Your Keys to Driving"* has not been changed in the workbooks so as to keep the integrity of the learning and readiness of students to sit for the written test.

The workbook also contains literacy exercises such as word searches, comprehension and dozens of activities. Students are to complete these, to increase their functional literacy so they can pass the test and be a road user who is fully aware of the language of driving, be it on signs, parts of the car, roadworthy certificates or blood alcohol content. The course is reasonably self explanatory for a person who can read satisfactorily. It can be delivered in small groups for people who have literacy problems. The length of the course is entirely dependent on the student's literacy needs, their preparedness to engage in the topic and willingness to sit the licence test at a local Queensland Transport office. For a motivated student, with approximately an 8-9 year old reading age, the course would take 30-40 hours to complete within a small group.

Program status

The program continues to be offered by the school on a voluntary participation basis. Many senior students take part, but exact participation figures since the program's inception were not able to be obtained.

Implementation barriers / cost issues

The cost is borne by parents/guardians. The delivery is freely provided by teaching staff but the bound workbook costs \$40 (which includes postage and handling). In addition, students should have access to a copy of *"Your Keys to Driving"*.

Evaluation

While no formal evaluation has been conducted, those consulted regard it as an excellent tool devised by specialised school staff. Their only concern is that the language is still too complex. However, the concept of multi-outcomes (i.e. improved literacy and gaining a license) is well regarded by the school.

1.1.8 Wacol Indigenous Driver Education Program

Program aims

To provide licensing theory training and on-site learner's licence testing to inmates of the Wacol Correctional Centre.

Components and delivery style

Mr Norm Clarke, Queensland Fire Services' Indigenous Liaison Officer, spends every Wednesday morning at the facility with students discussing road rules pertinent to the learner's license test. He is an Indigenous Fire Officer from Cherbourg and delivers the material in a culturally-appropriate manner.

Program status

The program commenced in 2003 and is utilised by inmates as needed. Once 10 participants are deemed at an adequate knowledge level to sit the learner's test, a Queensland Transport official visits the correctional facility and conducts the test.

Implementation barriers / cost issues

The Queensland Fire & Rescue Service provides Norm's services free to inmates as an in-kind contribution to the advancement of Indigenous Queenslanders. No financial support has been sought elsewhere to date. However, it is anticipated that the cost of the test and obtaining the license may become an issue for inmates. Hence, the Queensland Fire & Rescue Service will be seeking additional support from other government departments in the near future.

Evaluation

No evaluation planned.

1.1.9 Inala Elders Driver Education Program

Program aims

Similar to Wacol pilot, this program is designed to provide licensing theory training and on-site learner's licence testing to Indigenous residents of all ages in the Inala region.

Components and delivery style

With the endorsement of the Inala Elders, Mr Norm Clarke, Queensland Fire Services' Indigenous Liaison Officer, spends every Thursday afternoon at the local community hall with students of all ages discussing road rules pertinent to the learner's license test.

Program status

Since the program's inception in late 2003, several batches of 10 participants have sat for their learner's test. Tests are conducted at the local hall by a Queensland Transport staff member from Sherwood office.

Implementation barriers / cost issues

The Queensland Fire & Rescue Service provides Norm's services free to inmates as an in-kind contribution to the advancement of Indigenous Queenslanders. Financial support to pay for testing and obtaining licences is partially subsidised by the Inala Elders group.

Evaluation

No evaluation planned.

1.1.10 Main Roads Remote Operators Training Program**Program aims**

The Remote Communities Services Unit of Main Roads provides training to the Indigenous communities throughout Cape York and the Torres Strait. The unit has offices and training facilities in both Cairns and on Thursday Island. The main aim of the training is to increase the skill level of Community Development Employment Program and council employees in communities by offering culturally and technologically appropriate competency-based training. All training is project-based and increases communities' capacity to undertake their own infrastructure maintenance.

Components and delivery style

The Remote Communities Services Unit provides 'workforce skilling' to local people by delivering training programs for road plant operation, road maintenance procedures, pipe and culvert installation, aerodrome maintenance and project supervision. It delivers accredited training and assessments in the civil construction field:

- General Safety Induction Certificate
- Traffic Controller Certificates
- Certificate II in Civil Construction
- Certificate III in Civil Construction – Plant
- Certificate III in Civil Construction – Road Construction and Maintenance.

The training is run in small groups (usually two trainers to four to six participants) to allow for fairly intense instruction.

Program status

The unit began delivering 'workforce skilling' programs in communities in 1999 and, to date, the training has been offered and well received in 22 communities. The program is ongoing and continues to receive national recognition.

Implementation barriers / cost issues

The unit is extremely positive about the program and identified a number of benefits:

- Projects are community-based
 - materials, resources and delivery methods are culturally and technically appropriate as well as being community-specific
-

- provides 'hands on' practical skills along with theory that helps to understand the processes
- lowers costs for all stakeholders and empowers communities to undertake some infrastructure maintenance
- provides increased employment opportunities and skills for Indigenous people.

The only concern raised by the Remote Communities Services Unit related to driver licence testing. Many of the community members who are keen to enrol in the Main Roads training do not have a standard car licence, so the unit calls for better coordination between Queensland Transport, Queensland Police Service and Main Roads to ensure that, where possible, training and testing for all types of licences and tickets are conducted in partnership and at similar (perhaps standard) times of the year. Linking the Main Roads training to the mainstream licensing process would have immense benefits for all concerned and is being planned.

Evaluation

While no formal evaluation has been conducted, the program continues to attract substantial government funding. It has also received two Premier's Awards (2000, 2002) and two Main Roads Excellence Awards (2001, 2002).

1.1.11 Additional initiatives

Main Roads is also working to enhance employment prospects for Indigenous people in the central west of Queensland. In partnership with the Central West Aboriginal Corporation, Main Roads negotiated with contractors about available positions and undertook a skills survey of Indigenous people in Winton, Longreach, Barcaldine, Blackall and Alpha. This resulted in many new jobs being created, with some of these being filled by local Indigenous people. The survey and skills analysis document has been instrumental in attracting more than \$280,000 in funding for a range of projects designed to alleviate Indigenous unemployment in the central west.

For further information on the Main Roads Remote Communities Services Unit visit:

<http://www.mainroads.qld.gov.au/MRWEB/Prod/Content.nsf/0/7dcd3f7a3d228aa24a256def0009f35f?OpenDocument>

In addition to many driver training and licensing programs cited in this section, Queensland Transport has implemented a number of other moderately successful road safety initiatives targeting Indigenous communities over the past five years. These include:

- The *Remote Communities Project* which led to the appointment of Indigenous road safety officers in Hopevale and Kowanyama in 2000 to adopt a community-managed approach to road safety planning
- the *Community Road Safety Grant Scheme* where communities apply for up to \$2,000 to support a local road safety initiative
- a large scale "*Riding in the Back of Utes*" educational campaign
- the development of a number of road safety resources (ie. posters, postcards, bookmarks and videos).

The most noted of these resources are: (1) "*Easy's Road Safety Rules Rap*" video and workbook designed for school age children; and (2) the "*Driving our Future*" CD. This CD is particularly pertinent to the Indigenous Licensing Project because it is an interactive licensing resource. In a game format, it explains to licensing candidates both the theory and practical knowledge required to pass the written test and be a safe driver. Acknowledging that many of the city driving conditions are not seen in communities, the CD places the user in a vehicle

driving through the streets of Cairns and requires them to make decisions regarding give way and other road rules. If an error is made, the “virtual” driver is returned to the start of the game.

The visual format adopted is considered by local communities to be suitable to Indigenous learning styles. However, it does appear that a number of communities are not aware of the resource. Queensland Transport is currently rectifying this problem and it is envisaged that this resource might well become an important learning tool in remote communities. Queensland Transport management has also been advised of the need to edit the “*Driving our Future*” CD in light of the new 50kph residential speed limit.

1.2 Statewide Legislation and Policy Impacting on Indigenous Road Safety

There are several major policy initiatives currently being negotiated in Indigenous communities in Queensland that will have direct implications on the delivery and success of road safety initiatives: (i) the introduction of Alcohol Management Plans; (ii) a recent revision of the Council By-Laws by the Department of Aboriginal & Torres Strait Islander Policy; (iii) the proposed state-wide introduction of the new Queensland driver's licence; and (iv) the white paper on Indigenous governance. The impact of these social justice policies on Indigenous road trauma will be monitored over the coming years.

1.3 Current and Proposed Research

In addition to the evaluation of current Indigenous road safety programs in Queensland, CARRS-Q is undertaking two key research initiatives. Firstly, Colin Edmonston (Senior Research Officer) was awarded a three-year PhD scholarship to examine the trip characteristics contributing to Indigenous road crashes. This project uses both health data and interview data (crash narratives) with Indigenous persons admitted to all health facilities (hospitals and community clinics) in North Queensland. Feedback on this project will be provided at the next Indigenous Road Safety Forum.

Secondly, CARRS-Q is finalising a handbook for road safety professionals working in the Indigenous context – *‘Living knowledge: Practical guidelines for working with remote Aboriginal and Torres Strait Islander communities’*. The handbook focuses on listening to communities and cultural sensitivity. It supports the principle that sustainable road safety improvements require practitioners and policy-makers to better engage and empower communities to become more involved in decision-making and the delivery of programs/services. This will only be achieved through an improved understanding of, and adherence to, cultural and communication protocols among transport and road safety professionals. Given that there are few Indigenous people employed in these professions, ensuring that non-Indigenous researchers and practitioners work in culturally-appropriate and non-exploitive ways is of paramount concern. The handbook will include a set of practical guidelines that pinpoint the skills and knowledge needed to conduct research and work in partnership with communities in a culturally sensitive way.

While most organisations have a model for working with communities, we have found that many models are set up with little input from Indigenous people and oversimplify some important consultation processes. The handbook is being developed in consultation with a diverse group of Indigenous people and communities from around Australia, and has support from key Indigenous agencies. The guidelines will draw on community experiences of research, consultation and service delivery, as well as lessons learned from the few experienced Indigenous road safety fieldworkers in Australia. While the guidelines will mainly use road safety examples (as is the target audience), they will be useful for anybody working with communities as many of the principles are generic.

As part of the consultation process, a large multi-disciplinary workshop was held in Cairns to share personal experiences of research, consultation and community engagement. In total, 30

people (predominantly Indigenous) representing individual communities, government and other organisations participated in the day-long workshop held in Cairns in late 2004. The workshop was co-facilitated by Mr Colin Edmonston and Mr Horace Nona (Badu Island Council Advisor and Former Indigenous Road Safety Officer with Queensland Transport).

With regard to future directions in Indigenous road safety and transport service delivery in remote areas, Queensland Transport identified a number of generic issues for resolution:

- The training of researchers with appropriate skills to work in Indigenous settings
 - ways to support the successful transfer and dissemination of research findings and known crash risk factors
 - ways to strengthen research capacity relating to Indigenous issues (eg. Indigenous involvement in research processes, resolution of cultural concerns about ownership of research, empowering communities to develop their own people)
 - ways to allow time when researching to develop rapport with Indigenous communities.
-

2 NEW SOUTH WALES AND ACT PERSPECTIVE

2.1 Strategic Approach to Indigenous Road Safety

In order to effectively manage Aboriginal affairs in New South Wales, a whole-of-government approach has been adopted and is outlined in *"Partnerships: A New Way of Doing Business with Aboriginal People"*. This new way of doing business aligns with the core policy document of the Department of Aboriginal Affairs - *'Two Ways Together'* – designed to strengthen Aboriginal leadership and economic independence and build a partnership between Aboriginal people and the New South Wales Government. The core components of the plan are:

- making Government more accountable to Aboriginal communities and people
- an emphasis on Aboriginal culture and heritage
- strategies to improve key social indicators such as health, education, employment and economic development.

As a lead agency in the *'Two Ways Together'* plan, the New South Wales Roads & Traffic Authority (RTA), in consultation with Aboriginal communities, developed an *Aboriginal Action Plan 2001-2006* which sets direction and priorities for transport and road safety issues impacting on Indigenous people. Central to the *Aboriginal Action Plan* was the appointment of an Aboriginal Programs Manager (Mr George Shearer) and seven Regional Program Consultants who provide access to local communities. The Regional Program Consultants are based in the following regions: Sydney; Southern; South West; Western; Hunter; and Northern. *"They are responsible for targeting regional road safety issues and managing the Local Government Road Safety Officer Program ... With the assistance of the Aboriginal Programs Manager, each region has developed its own two year action plan which identifies specific achievable outcomes and links to the state plan"* (Shearer, 2005). A copy of the *Aboriginal Action Plan 2001-2006* is housed at:

http://www.rta.nsw.gov.au/publicationsstatisticsforms/downloads/aboriginal_action_plan.pdf

The Roads & Traffic Authority's *Aboriginal Action Plan* comprehensively addresses key priority areas of action outlined in the Commonwealth Department of Health & Ageing's *National Injury Prevention and Safety Promotion Plan 2004-2014*.

The associated *Aboriginal Justice Plan* recognises that crime and Aboriginal incarceration should not be seen in isolation. The existing unequal status seen in health, housing, education, employment, income and justice, means that criminal justice agencies cannot overcome these social disadvantages alone. The participation of other government departments is critical and that is why the Aboriginal Justice Plan will be implemented through the New South Wales Aboriginal Affairs: *Two Ways Together* cluster group process, which is a whole-of-government mechanism.

2.2 Data quality and crash causal factors

Like many other jurisdictions, Indigenous status is not recorded in road crash data in New South Wales, which makes it difficult to determine the magnitude of the Aboriginal injuries as a result of road trauma. However, *"results from the New South Wales Health Department's Injury Surveillance Projects in the Shoalhaven and Mid North Coast areas indicated that Aboriginal people are 3.4 times more likely than non-Aboriginal people to be killed from a road crash ... When under-identification estimates were corrected in the Mid North Coast study the results showed that the real incidence rate among Aboriginal people is six times that of non-Aboriginal people"* (Reisch, 2005). These trends are consistent with data from South Australia, Western Australia, Queensland and the Northern Territory.

The 2004 Country Road Safety Summit did recommend “*identifying Aboriginality in vehicle registration, driver licensing and crashes*” and the RTA has since applied for access to the National Coronial Information System housed at Monash University in Victoria.

Similar to other Australian jurisdictions, passenger and pedestrian crashes are the most common type of crashes involving Indigenous people and known risk factors include: alcohol; overloading and non-use of restraints; increased exposure through longer distances travelled; unlicensed driving; speed; and to a lesser degree, fatigue.

2.3 Road Safety Initiatives and Programs

The RTA is currently implementing a number of strategies to improve road safety for Aboriginal people in New South Wales. The program of strategies outlined in the Aboriginal Action Plan form the state-wide “*Bring the Mob Home Safely*” campaign. Initiatives central to the “*Bring the Mob Home Safely*” campaign are described below.

2.3.1 Bring the Mob Home Safely

Aboriginal Road Safety Public Education Resources

The RTA (in consultation with a steering committee made up of key Aboriginal stakeholders) recently developed a set of road safety public educational resources targeting key road safety issues in Aboriginal communities including, speed, drink driving, fatigue, restraint usage, pedestrian safety, bicycles and overloading. These high quality resources were designed by Aboriginal people and will be used to raise the road safety profile among Aboriginal communities in New South Wales.

Since 2003, the RTA has targeted readers of the *Koori Mail*, *National Indigenous Times* and *Tungare News* by including these newspapers in all state-wide road safety print media campaigns. The RTA is currently extending its regional and corporate road safety public education television commercials to *Imparja* television as a number of border towns/communities in New South Wales and Queensland do not receive commercial television.

Aboriginal Community Patrols

In 1998, the Crime Prevention Division, in partnership with Department of Aboriginal Affairs, Department of Community Services and New South Wales Police, piloted Aboriginal Night Patrols in four communities in New South Wales. Agencies in Kempsey, Dareton, Narrandera and Forster were each provided with a vehicle and funds for fuel and maintenance. Aboriginal Community Patrols are community-based services that provide safe transport options and outreach support to young people who are on the streets late at night. The overall aim of the program is to reduce the risk of young people becoming involved in crime and anti-social behaviour, either as victims or offenders.

Patrols operate late at night and early morning when other support services are not available. They have the capacity to engage young clients that are usually inaccessible to primary support services and provide an opportunity to promote other support services that can address risk factors that lead to involvement in crime. Among other crimes, patrols can assist to reduce the incidence of: malicious damage to property; vandalism; alcohol-related violence; motor vehicle theft; illegal use of motor vehicles; and minor theft offences.

The New South Wales Attorney Generals Department, Crime Prevention Division, currently funds patrols in the following locations:

- Armidale

- Bourke
- Bowraville/Nambucca Valley
- Brewarrina
- Casino
- Dareton
- Dubbo
- Kempsey
- Mungindi
- Newcastle
- Shoalhaven
- Wilcannia
- Gulargambone
- Coonamble
- La Perouse
- Ballina
- Taree

Patrols are governed by local Project Steering Committees that provide external oversight and support to auspice organisations and comprised local service providers and community representatives. Steering Committees provide advice in regard to the operational characteristics of patrols, to ensure that patrols remain responsive to emerging needs at a local level. Aboriginal Community Patrols look different within each community as each community has its own unique issues and characteristics.

2.3.2 On the Road – Aboriginal Driver Education Program

On the Road is an Aboriginal driver education program, which targets Aboriginal communities of Box Ridge, Gundarimbah, Jali, Rio/Tabulam and Muli Muli. It is also available at the nearby larger towns of Kyogle, Casino and Lismore. *On the Road* is funded by the RTA, Motor Accident Authority and Attorney General's Department, and is delivered by the Adult Community Education provider on the North Coast of NSW, with approximately 7000 enrolments from the general community each year.

The Lismore Driver Education Program - '*On the Road*' - addresses a number of barriers to Aboriginal people obtaining driver's licences including: (i) difficulty in accessing and reluctance to use the regional RTA service centre; (ii) low levels of literacy; and (iii) changes to licensing procedures (i.e. learner drivers now required to complete 50 hours of driving before attempting to obtain a probationary licence). The State Debt Recovery Office has also been involved in the program as many participants have outstanding fines. As at December 2002, 60 people had regained their licence through fine negotiations and over 200 participants had gained their licence in total. On a relatively small budget, the program assists Aboriginal people gain a full Class C Licence by providing access to computerised Driver Knowledge Testing (DKT) and outreach licence testing in Aboriginal Land Councils, as well as driving lessons and basic computer training for licence applicants. The program also offers driver mentoring, vehicle systems and maintenance training, and first aid training. Results of an evaluation of the program can be found at <http://www.thegeorgeinstitute.org/research/injury-prevention-&-trauma->

[care/research/indigenous-injury/evaluation-of-the-lismore-driver-education-program-on-the-road.cfm](#)

2.3.3 Knockout Competition

The Annual Aboriginal Rugby League Knockout run over the October long weekend is the only alcohol free adult sporting carnival in New South Wales. This is the largest cultural event attended by Aboriginal people with over 60 teams and large numbers of people travelling long distances from many parts of the state. The RTA runs an annual state-wide and regional fatigue campaign to coincide with competition. In addition, the RTA implemented a drink driving public education campaign to also coincide with the competition, as well as providing alternative transport options for people attending the event.

2.3.4 Aboriginal Communities Development Program

The Department of Aboriginal Affairs' Aboriginal Communities Development Program is a capital works program to upgrade living conditions in Aboriginal communities. This includes: new housing; refurbishing and upgrading of existing housing; and upgrading essential safety infrastructure such as roads, footpaths and street lighting. Twenty two Aboriginal communities across New South Wales have been identified as "priority communities" for works through a survey developed between the Aboriginal & Torres Strait Islander Commission, for its National Aboriginal Housing Strategy (NAHS), and the Australian Bureau of Statistics, which identified a range of indicators.

2.3.5 Sober Driver Program

The RTA and Motor Accidents Authority (MAA) jointly fund the statewide *Sober Driver Program*, to address drink driving recidivism in NSW. The Program consists of nine two-hour sessions conducted over a nine-week period. Issues addressed include consequences of drink driving, effects of alcohol on driving, managing drinking situations, alternatives to drinking and driving, relapse prevention and stress management.

This program was developed as a whole of Government approach with representation from a number of agencies, and is delivered by the Department of Corrective Services through Probation and Parole Officers.

A special version of the Program is available for rural and remote regions which includes Aboriginal resource material. The material is more reflective of Aboriginal lifestyles and culture and was developed in consultation with Aboriginal communities.

2.3.6 Community-Based Driver Knowledge Testing Licensing Program

Program aims

The RTA's flagship Indigenous licensing and driver education initiative is the Community Based Driver Knowledge Testing (CBDKT) Program. The CBDKT program targets Indigenous people who are unlicensed because of access issues or have problems reading and understanding the knowledge test.

The recent inquiry into '*Driving Offences and Aboriginal People*' conducted by the Aboriginal Justice Advisory Committee (AJAC) highlighted the social justice imperatives associated with programs of this nature. It found that more than 2,000 Aboriginal people were convicted in New South Wales in 2001 of driver licensing offences. This makes licensing offences the third most common type of convictions of Aboriginal people, after assault and disorderly conduct. Of those convicted in 2001, 7.8 percent received a custodial sentence (AJAC, 2003).

Components and delivery style

The CBDKT program is offered to remote locations throughout NSW to assist people in Aboriginal communities and people with low literacy levels to obtain a driver's licence. In 2000/01, CBDKT was available in community centres such as Nyampa Aboriginal Housing Company at Menindee, Broken Hill TAFE, employment agencies in Walgett and Moree, and in Correctional Centres at Mannus, Broken Hill, Ivanhoe, Brewarrina, Bathurst and Kirkconnell. The program is now also available in Wilcannia, Bourke, Dubbo, Forbes and Orange at accessible locations, such as TAFE Colleges, Skillshare, and Aboriginal Land Council Offices.

In each of these communities, Indigenous people have been accredited to translate the test into a language that is recognised locally to increase comprehension. The Mannus Correctional Centre boasts one of the best examples of the CBDKT program, for which it won a Justice Medal in 2001 from the Law and Justice Foundation of NSW. The Justice Medal is presented to an individual/institution who has demonstrated outstanding achievement in improving access to justice in NSW, particularly for socially or economically disadvantaged people. Details of the Mannus Correctional Centre CBDKT program are housed at:
www.aic.gov.au/conferences/indigenous2/hyslop.pdf

Program status

The CBDKT program continues to grow in NSW and is being offered in most communities with a substantial Indigenous population (including correctional centres). For example, a pilot licensing program has been implemented with Corrective Services to enable inmates to undergo training to assist them in obtaining a licence before their release. Importantly, if an inmate successfully obtains a car licence, they have the option of receiving training to get a licence/ticket of their choice. This type of program emphasises the importance of having a licence to gain employment. The pilot is being conducted at Bathurst jail and targets offenders with multiple driving offences.

Since 1999/2000, the Magistrate from Nowra Local Court has used CBDKT as part of an alternative sentencing option, giving many people an opportunity to get their licence rather than face the possibility of imprisonment and extensive loss of licence. This Program not only allows an accused to get the appropriate vehicle licence, but also encourages the offender to get an additional licence (eg. forklift ticket). Once again, there is an emphasis on improving employment prospects. In 2000/01, 18 participants from the Jerringa Aboriginal community attended a four-day course, as part of the Young Offenders Program, facilitated by staff from the RTA, Department of Fair Trading and police. Of the 18 participants, 16 gained their learner's permit.

Implementation barriers / cost issues

At present the only perceived barrier is a lack of Indigenous employees at testing centres and motor registry offices. However, the RTA recently secured \$250,000 funding to recruit and train seven new Indigenous staff to work in communities in NSW with a large Koori client base.

Evaluation

The RTA is currently evaluating the CBDKT program and progress against other initiatives outlined in the Aboriginal and Torres Strait Islander Action Plan 2001-2006.

2.3.7 Additional initiatives

Other initiatives currently being run by the RTA targeting Indigenous road safety include:

- *Kooris and Cars* – in conjunction with the Department of Fair Trading and focuses on consumer protection by providing Indigenous people with safety and roadworthiness knowledge for selecting vehicles. Information sessions are a free service provided throughout NSW and provide participants with a hands-on demonstration covering basic mechanical and safety checks, including how to detect dangerous or sub-standard body repairs. The session also covers legislation regarding L & P plates, the knowledge test, and everything anyone needs to know about licence applications, cancellations and renewals.
- *Driving for Employment* – The South Sydney Council is running a project which focuses on the importance of having a licence for employment. Through free literacy training and a local public education campaign, the program aims to increase Koori licensing rates.
- *Capsule Program* – Program in which baby capsules are hired out to families through local Aboriginal Community Controlled Medical Services (coordinated by the National Aboriginal Community Controlled Health Organisation). Upon return, the hiring fee is reimbursed. Community Development Employment Program participants are also involved and are responsible for cleaning and maintaining the capsules between hires.

2.4 Current or Proposed Research

Acknowledging that children are over-represented in Indigenous road crashes, the George Institute, in partnership with the RTA and NSW Health, have recently been funded by the National Health & Medical Research Council to conduct a 'Safe Koori Kids' project. This applied research project has a strong injury prevention and road safety focus, using a community capacity-building model. Over a three year period, the research aims to: (i) explore the incidence and impact of intentional and unintentional injury in selected urban Indigenous communities in NSW; (ii) identify factors contributing to positive and negative consequences relating to injury; (iii) develop and evaluate initiatives in Indigenous communities aimed at increasing resiliency in at-risk children, youth and families; and (iv) make recommendations for changes to policy and practice across a range of government portfolios and non-government organisations.

Like other jurisdictions, New South Wales is committed to increasing the number of Indigenous people with valid licences and reducing their involvement in licence-related offences. However, George Shearer (RTA) and Lee Towney (Attorney Generals Department, Crime Prevention Division) indicated their "*commitment to not only getting people licences, but also examining the behavioural issues leading to licence loss to identify problems in the system*" (Towney, 2005).

The Attorney Generals Department, Crime Prevention Division's *Offence Targeting Project* aims to combat the over representation of Aboriginal people in the criminal justice system, by targeting specific driving offence categories and patterns in which over representation primarily occurs. The focus of the project is to target and focus attention of specific offence categories to reduce Aboriginal offending and incarceration rates, specifically to:

- target specific offence categories committed by Aboriginal people
- establish Aboriginal crime and community profiles
- develop crime prevention strategies across the whole criminal justice spectrum, including prevention, diversion and custodial alternatives.

Stage 2 of the project, which is now under way, identifies patterns and local circumstances leading to offenders committing a certain offence. This involves matching offence categories with local police records to extract circumstances which relate to offence, and exploring other circumstances through custodial and community consultation.

According to George Shearer (2005), "*the RTA is committed to the ongoing evaluation of all Indigenous Koori road safety initiatives*".

3 SOUTH AUSTRALIAN PERSPECTIVE

3.1 Strategic Approach to Indigenous Road Safety

The South Australian Department of Aboriginal Affairs & Reconciliation is the South Australian government agency with prime responsibility for Indigenous issues in the State, under the Minister for Aboriginal Affairs & Reconciliation. However, the South Australian Department of Transport, Energy & Infrastructure, under the Minister for Transport, takes the lead role in the government coordination of road safety issues, including Aboriginal road safety. On all Indigenous road safety issues, there is close liaison between a number of government agencies.

In 2003, the Department of Transport, Energy & Infrastructure released its own *"Statement of Reconciliation"* in regard to the State's Aboriginal people, emphasising cultural respect, relationships and providing opportunities. The department also supports the State Government's Policy Framework for Aboriginal Affairs - *"Doing It Right"* - particularly with respect to forming partnerships and empowering communities to take responsibility for, and contribute to, their own advancement.

In terms of Indigenous road safety governance, the Government's inter-agency Road Safety Advisory Council has set up an Aboriginal Road Safety Taskforce (containing Indigenous representation) to provide advice on road safety issues affecting Aboriginal people in the State. This Taskforce meets four times a year, of which at least one meeting is held in an Aboriginal community. The Taskforce discusses both behavioural and infrastructure issues and comprises representation from the Department of Transport, Energy & Infrastructure, the Department of Aboriginal Affairs & Reconciliation, South Australian Police, all three regional Aboriginal Councils, former Aboriginal & Torres Strait Islander Commission Chairs, and the Aboriginal Health Council of South Australia.

3.2 Data Quality and Crash Causal Factors

Transport data on Indigenous road trauma in South Australia is considered to be *"somewhat inadequate"* by stakeholders. *"What little data exists is likely to be an underestimation of the actual involvement of Aboriginal people in road crashes"* (Bailey, 2005).

Aboriginality is recorded in health/hospital road crash data, but not always. The reporting system has a mandatory field asking about Aboriginality/ethnicity and the medical admission officer is encouraged to make verbal inquiries regarding ethnicity. However, the client is entitled to decline to answer such questions and the relevant data field allows for an *'Aboriginality – not stated'* response. Aboriginality is usually recorded in Coronial files, where this is the case.

South Australian Police currently do not require Aboriginality to be recorded on their road crash reports. Therefore, Aboriginal involvement in road crashes are generally underreported to police and/or hospital, unless serious. It is possible to assign Aboriginality in police crash records if the driver's/passenger's residential/postal address is that of an Aboriginal community. This is a data analysis technique used by a number of jurisdictions.

In terms of consistency, there is generally good consensus between health/hospital recording and transport/police data for drivers, passengers and pedestrians in South Australia, but hospital data tend to contain many more cyclist and motorcyclist crashes. Most Aboriginal road crashes, however, tend to happen in rural areas, where medical assistance is usually more readily accessible than police services. For this and other reasons, health/hospital data for Aboriginal road crashes tend to be more comprehensive (better quality).

Even allowing for known underreporting, the limited data available in South Australia indicates an involvement rate by Aboriginal people in crashes of 3-4 times that for non-Aboriginals, which is comparable with rates in other Australian jurisdictions. In terms of fatalities, *"Aboriginal people*

make up 1.5% of the State's population, but the death rate of 4.6% is three times the death rate of the population" (Bailey, 2005). South Australian Police are currently examining ways to reliably record Aboriginal status as part of the crash reporting process.

Indigenous people in South Australia are significantly more likely to be injured as passengers or pedestrians. The major road safety issues for Indigenous and remote areas are: speeding (both in and entering communities – *"too fast for the conditions, not necessarily faster than the posted speed limit"*); *drink driving*; *failure to wear seatbelts*; *vehicle-overcrowding*; *poorer infrastructure (less lights and markings)*; and *pedestrians (sometimes intoxicated) wearing dark clothing at night*. *Remoteness itself is a factor due to the long distances travelled before crash victims may be found, and travel by/to emergency medical services"* (Bailey, 2005).

3.3 Road Safety Initiatives and Programs

The Aboriginal Road Safety Taskforce has identified raising the profile of road safety as an issue of concern for consideration within local Aboriginal consultative structures, such as community councils. It is anticipated doing this will encourage Aboriginal people to take a greater share of the responsibility in reducing Aboriginal road crashes.

It is considered that mainstream initiatives, such as those described in the *South Australian Road Safety Strategy 2003-2010* will benefit all South Australians, including Aboriginal people. Indigenous-specific and remote programs are very cost-intensive. So, unfortunately, the large Aboriginal Seatbelt Campaign, developed by Transport SA in partnership with a number of Aboriginal agencies (identified in the 2003 review), is no longer running.

However, a draft Aboriginal road safety strategy for South Australia is being prepared by the Taskforce for consultation and eventual joint approval by the South Australian Government and Aboriginal community stakeholders. Key themes in the draft strategy are: community involvement; safer roads; safer vehicles; safer people; and research and policy initiatives. It is envisaged the strategy statement will provide an overall coordinating framework for the direction, planning, implementation and evaluation of Aboriginal road safety initiatives. As a priority, *"there is a strong invitation from Aboriginal communities in South Australia for increased police presence in communities ... not necessarily booking, but in an educative role also"*. Furthermore, *"South Australia now has two Aboriginal Driver Instructors that operate regionally – this is a positive step in encouraging more Aboriginal people to get licences"* (Bailey, 2005).

In terms of operational programs, South Australian stakeholders reported that the *Corrugations to Highways Aboriginal Road Safety Video* is widely used throughout the State and well received by communities.

3.4 Current or Proposed Research

Implementation processes for the draft strategies are currently being proposed, in readiness for the approval process. "Implementation is most important – Aboriginal people want to see action on the ground". The Aboriginal Road Safety Task Force is also committed to monitoring promising initiatives from other jurisdictions (primarily through the Health/InfoNet Indigenous Road Safety Website) which may be suitable for implementation in South Australia.

While evaluation studies for individual initiatives are planned, the overall evaluation direction would be to determine if there is any change in the over-involvement of Aboriginal people in road crashes.

Most of the recommendations relevant to South Australia in the Brice (2000) report and the original 2003 review have since been implemented or are due to be. These, too, will be evaluated. In terms of research, Department of Transport, Energy & Infrastructure maintains a monitoring role of interstate and national Indigenous road safety initiatives that may be

beneficial to South Australia and is working with the South Australian Police to improve crash data collection regarding the nature and circumstances of Aboriginal road crashes. Flinders University's Research Centre for Injury Studies is also currently investigating alternative transport options for Aboriginal people (i.e. community-run transport). However, this project is in its infancy.

South Australian stakeholders are excited by the prospects of the HealthInfoNet Indigenous Road Safety Website, but believe that its success will depend on its accessibility. *"The Clearinghouse and its products need to be user-friendly and accessible to communities ... there may need to be hard copies of information also"* (Bailey, 2005).

4 NORTHERN TERRITORY PERSPECTIVE

4.1 Strategic Approach to Indigenous Road Safety

Given that 28.8% of the Northern Territory's population is Indigenous (the highest proportion of any Australian jurisdiction), Indigenous road safety is a transport priority. The Transport Safety Division of the Department of Infrastructure, Planning and Environment is ultimately responsible for Indigenous road safety in the Northern Territory. Within the Transport Safety Division, there is a small unit of ten staff (led by Manager, Mr Michael Mills) specifically devoted to the *Aboriginal Road Safety Program*. This unit leads the Northern Territory Road Safety Committee and works closely with Regional Road Safety Committees, Northern Territory Police, the Department of Health and Charles Darwin University (formerly Northern Territory University). Northern Territory stakeholders argued that *"the success of Indigenous road safety in the Northern Territory is dependent upon local action plans developed by local Road Safety Councils ... This ensures that initiatives address local problems and are owned by communities"* (Palmer & Mills, 2005).

4.2 Data Quality and Crash Causal Factors

Police do identify Indigenous status as part of the crash reporting process in the Northern Territory, thus allowing Indigenous versus non-Indigenous comparisons with regard to crash trends. Northern Territory stakeholders report that *"while still a little inconsistent, the quality of this data is improving all of the time and information on Indigenous road fatalities is regularly published through the Northern Territory Road Safety Committee"* (Palmer & Mills, 2005).

In terms of crash type, pedestrian and passenger crashes predominate. The Northern Territory Police report that *"between 2002 and 2004, pedestrian crashes accounted for 35% of all Indigenous road fatalities, compared to only 7% of all non-Indigenous road fatalities"* (Palmer & Mills, 2005). Interestingly, a large proportion of the Indigenous pedestrian crashes occurred in major centres (Darwin), so the *Aboriginal Road Safety Program* unit are currently trying to examine ways of collecting 'usual place of residence' data to better profile the pedestrians being injured in town.

This *Aboriginal Road Safety Program* unit stressed that *"Indigenous crashes are often the result of a combination of causal factors, primarily alcohol use, the non-wearing of seatbelts and overloading of vehicles, and a lack of alertness shown by drivers and pedestrians ... For example, 80% of all pedestrian fatalities in the Northern Territory between 1999 and 2003 involved an Indigenous pedestrian and alcohol ... Similarly, in only 15% of Indigenous road fatalities a seatbelt was worn compared to 60% in non-Indigenous road fatalities ... Speed and fatigue do not pose major problems"* (Palmer & Mills, 2005).

Despite evaluation evidence to suggest that Open Load Space (OLS) crashes have decreased in the Northern Territory, the unit reports strong anecdotal evidence that the non-wearing of restraints and riding in the back of utes are still major problems. *"It is not uncommon for a tip truck to be carrying 20 people for more than 200km ... There is an urgent need for re-education in this area, that is, why the law is so"*.

The Willowra community cited *"old and unroadworthy vehicles and poorly maintained dirt roads"* as other factors increasing crash risk in remote Indigenous communities (Bennett, 2005).

4.3 Road Safety Initiatives and Programs

Northern Territory stakeholders cited a number of promising road safety initiatives borne out of extensive community consultation. Once again, the primary focus is on driver training and road safety education.

4.3.1 Remote Areas Driver Training Program

Program aims

The Remote Areas Driver Training program was first established in 1997 as a partnership between Northern Territory University (NTU, now Charles Darwin University) and Territory Insurance Office (TIO). Its primary goal is to deliver and facilitate driver instructor training in rural and remote communities in the Northern Territory which have in the past not had access to training through isolation, cultural and financial restraints. To make driver training in communities viable and sustainable, a strategy was developed which involved training community-based driving instructors and providing them with relevant and culturally appropriate resources to empower communities to take ownership of their driver training and road safety issues.

After consultation with various government stakeholders (i.e. Motor Vehicle Registry (MVR), Driver Training and Licensing (DTAL), and Transport and Works) a nationally accredited course was chosen - *Certificate III in Road Transport (Driving Instructor)* - and 4 modules were chosen out of 12 to be delivered in communities. Successful completion of these modules gives participants a "Restricted" Instructor's endorsement allowing them to deliver driver training within their own community. If a student chooses to, they can then go on and complete the other 8 modules to gain their full Certificate III and deliver anywhere in the Northern Territory. Successful sponsorship was sought from Territory Insurance Office and the program is now in its eighth year. The program has not only given communities the chance to take ownership of their programs, but has provided employment opportunities for both instructors and students gaining their licence as well as creating another source of income for communities through DTAL and government funding of courses.

Components and delivery style

There are many critical factors that need to be considered when developing programs for remote and Indigenous communities, including: local customs, beliefs and community dynamics; traditional and contemporary management and decision-making systems which govern each community; stage and pace of development; and community ownership. Road Safety NT, Batchelor College, Motor Vehicle Registry (MVR), Police, Aboriginal Community Police, community members and driving instructors assist with the development, direction and delivery of the program. Courses are delivered over a two-week period in each community and the licence status of potential candidates is checked by the MVR prior to commencement, as per legal requirements, to confirm students are eligible to gain the appropriate licence and do not have any outstanding traffic convictions.

After an audit and quality control checks, the NTU was given authority by the MVR to undertake assessments for motor vehicle licences. This in itself has made a significant difference in delivery of training. In previous years, providers would deliver courses, then have to wait, often considerable lengths of time for MVR or police to come out and assess students for both their learner's licence and provisional licence. By approving providers to assess on-site, training has become more viable and efficient. Students are issued with Statements of Attainment for courses completed (e.g. TCG 018-Drive Vehicle Theory) and immediately given approval (via receipt) to undertake the practical components. On-site testing has greatly reduced attrition rates.

The abbreviated Certificate III program for Restricted Instructors comprises the four modules pertaining to in-car training and road law. The additional eight components of the Certificate III are later offered should participants choose to become qualified to be a mainstream driving instructor. The training consists of 78 hours of instruction that covers both theory and practical application. The theory component covers mainly road law and understanding and theory behind safe and defensive driving. The practical aspect involves extensive in-car training including defensive and economical driving practices, vehicle maintenance and correct and safe

driving techniques. To overcome literacy problems, school teachers and adult educators are often invited onto the course and they are then able to deliver the theory component, leaving the Aboriginal instructors to deliver the in-car practical component. A driver instructor's pack has also been developed consisting of instructor's procedures manuals, videos, flip charts, resource books with overheads, etc. Training is delivered on site in the community although consideration is being given to conducting some programs centrally (eg. Alice Springs, Katherine and Nhulunbuy) allowing a greater catchment of communities.

The course targets: Community Development Employment Program (CDEP) workers; unemployed people with driving experience and an interest to teach; teachers and adult educators; Aboriginal Community Police Officers; and any other persons selected by the community as appropriate. For cultural reasons, it is always good to have a cross section of the community (both males and females) to take into consideration clan groups and social issues.

Participants must:

- have held a "C" Class licence for at least 3 years
- not have a drink driving conviction for at least 3 years
- obtain a medical certificate for commercial drivers
- submit to a criminal history check with police (\$25)
- supply \$5 for a licence upgrade with MVR on passing assessments and successfully completing above.

Aboriginal Community Police Officers (ACPOs) are always informed of courses in their area and invited to participate, give presentations to classes, or just to touch base with the program. ACPO's are crucial to the program, especially when there is no one else qualified to assess, as is the case with the Aboriginal (Restricted) Instructors and Trainers. Other operational support is through the NT Road Safety Council, schools within the communities that may be able to deliver theory for courses, police and community in general. Successful partnerships have also been formed with Western Australian Roadwise, WA Police (Road Safety Section), and South Australian Police. This has enabled a sharing of information and strategies to address issues common to the three states. This partnership has led to develop a tri-state video on Indigenous road safety and driver training [see *'Corrugations to Highways'*].

Program status

Territory Insurance Office agreed to fund the program initially as a pilot for three years. This funding was extended based on the ongoing demand for the program.

Implementation barriers / cost issues

Firstly, because of the transient nature of community people, a significant number move on. Hopefully with their new skills still in place, they will be able to show and teach their extended family wherever they go, still achieving desired outcomes. Secondly, the community often selects the wrong people to attend the course. People are chosen to do the instructor's course because of their high level of skill and involvement in the community but, when it comes to delivering training, these people are usually too busy to deliver dedicated training because of other community commitments. Thirdly, driver training is low on the community agenda (compared to health and politics) and there is often a general apathy towards driver education and road safety issues (often because during the wet season road travel is not possible). Budget constraints and lack of availability of vehicle for driver training, changes in community management, and a lack of motivation by some trained instructors to get programs up and running, all pose implementation barriers.

Evaluation

Over 160 instructors have been trained, over 1,000 adults have successfully obtained a C class, LR, MR and/or HR licence through the program and about 500 additional students have passed the theory component. A 90 percent pass and completion rate is achieved for students over all courses. Instructor training has been delivered in communities throughout the Northern Territory from Arnhemland through to Central Australia. Initially many programs were conducted in the "Top End" in places such as Borroloola, Groote Island, Millingimbi and Arnhemland with not much emphasis on Central Australia. As popularity of the program has increased, courses have been conducted in Tennant Creek, Katherine, Yuendumu (Tanami) and Alice Springs.

Additional initiatives

The NTU recently developed a short educational video (running time 12 mins) as a resource to complement the larger Remote Areas Driver Training Program. The video uses acronyms to help students recall a checklist to ensure that they are ready to drive. It focuses on maintenance, legal and safety checks prior to driving.

- **F** = Fuel (Checking the fuel gauge)
- **L** = Legal (Checking the driver has a valid licence and the registration is current)
- **O** = Oil (Checking the oil dipstick)
- **W** = Water (Checking the coolant and water in the radiator)
- **E** = Electrics (Checking battery terminals, water in the cells, vehicle lights, etc)
- **R** = Rubber (Checking the tyres)
- **S** = Safety (Safety checks – mirrors, indicators, scanning and shoulder check)

The video uses a show and revise format and fairly simple language for the most part. However, there are a couple of instances in which technical jargon is used (eg. "friction point", "revs per minute"). It also discusses the role of the clutch, brake and accelerator and gets students to a point at which they can start the car and move off safely.

4.3.2 Northern Territory Driver Training and Licensing (DTAL) Program

Program aims

The Driver Trainer and Licensing (DTAL) Program operates throughout the Northern Territory for the NT Department of Education. In an initiative to help reduce the incidence of road accidents, the Territory Insurance Office (TIO), through its Motor Accident Compensation scheme, funds the program which provides subsidised training for new or novice drivers. The DTAL manager is responsible for program planning, implementation, monitoring and promotional activities, ensuring that the program is accessible to all eligible participants. DTAL provides professional driver training and education to any student who is a NT resident (minimum three months) and is over 16 years of age. The course aims to provide learner drivers with the basic knowledge and practical skills to enable them to become safe, efficient and skilful drivers, thus making the NT roads safer.

Components and delivery style

The scheme offers all sixteen year old Northern Territory residents ten hours of theory instruction, and eight hours of practical driver training at little or no cost. There are two theory tests (DTAL and MVR) students need to pass before they can go the Motor Vehicle Registry to obtain their free NT 'C' class learner's licence. Not all students pass the test first time round.

Candidates who pass both theory tests are then eligible to get a learner's licence at no cost, and may subsequently be issued with a provisional licence before the age of sixteen years and six months. Note, non-DTAL candidates are not permitted to hold a provisional licence until they reach sixteen years and six months. Although the DTAL program is administered through high schools, non-students may participate by applying to local high school DTAL coordinators.

Vouchers are issued through DTAL to those who pass both theory tests for eight hours of practical driving instruction (valued at \$35 per hour). Vouchers are only used for the practical training. If a student requires extra lessons, then the student will need to pay extra for the additional lessons. The vouchers cannot be used to fund the hour required for the driving test. If a driving school charges more than the \$35 amount, then students must make up the additional charge.

Courses vary from school to school depending on student numbers. For example, Casuarina Senior College runs a course every five weeks, while others may hold only two courses for the year.

Program status

The program continues in the first semester of schooling each year throughout NT.

Implementation barriers / cost issues

As suggested above, vouchers for eight hours of free practical lessons are provided to students upon passing the theory component. However, students who undertake the practical driving test need to pay \$20 at the Motor Vehicle Registry for the booking, plus extra costs if they use the instructor's vehicle.

Evaluation

As the program is offered through hundreds of participating schools, the DTAL manager indicated that it is almost impossible to estimate the number of students who have participated in the program. However, the program has been well received by students, parents and NT driving schools and has ongoing commitment from TIO.

4.4 Overview of the Aboriginal Road Safety Program

The *Aboriginal Road Safety Program* comprises a suite of initiatives endorsed by the Transport Safety Division of the Department of Infrastructure, Planning and Environment and the Northern Territory Police. These include:

- **Re-education Campaign Targeting Riding in the Back of Trucks/Utes:** A re-education campaign is being developed for a number of selected Aboriginal communities (Wadeye, Daly River & Peppermenarti) where there has been a history of people riding in the back of trucks/utes. The campaign is designed to reinforce why the law is in place. Two radio ads will be produced: one in English; and the other in a local dialect. Posters are also being developed to support the radio message.
- **Tracks Are For Trains Campaign:** An education campaign was developed to raise an awareness of rail safety in remote areas prior to the opening of the new line between Alice Springs and Darwin in late 2003. The campaign urged communities to develop personal responsibility for rail safety – STOP, LOOK, LISTEN and THINK. The strengths of the campaign included: utilising local community media networks to increase ownership (ads often in local dialect); forming new partnerships with existing networks (Land Councils); and a sound consultation process to develop culturally-appropriate

messages and resources. Mr Mills reported that *"it's time to refresh the existing campaign and raise awareness among school children"*.

- **Vulnerable Road Users Pedestrian Campaign:** A campaign is being developed to improve the safety of road users in the urban environment and will underline the responsibilities we all have as road users, either as pedestrians, cyclist or drivers. A core area of the campaign will focus on itinerant Aboriginal pedestrians that visit and live in larger urban centres. An existing program called the *'Tea & Coffee Run'* that goes to itinerant camps and talks with residents about safe pedestrian behaviour in partnership with Mission Australia's Day Patrol will be incorporated into the campaign.
- **Aboriginal Community Police Officer Workshops:** In partnership with the Northern Territory Police, local Road Safety Officers conduct regular workshops with Aboriginal Community Police Officers (ACPOs) addressing a variety of road safety and rail safety issues (eg. roll cage enforcement, drink driving, roadworthiness of vehicles, etc.). The workshops have a theme of *"Look After Your Mates"* and help ACPOs to develop safety promotional material appropriate for their individual communities.
- **Easter Campaign:** As part of the larger Easter Campaign for 2005 that targeted the use of seatbelts, specific radio messages were translated into a number of Aboriginal languages for central and northern regions of the Territory and aired on Indigenous radio stations.
- **Driving With Road Trains Campaign:** As part of a larger *'Driving With Road Trains'* campaign in 2004, a TV commercial was produced for Aboriginal road users to inform them about their responsibilities as a road user and the need to be aware that they will be sharing the road with road trains.
- **Driver Training Prison Program:** The Driver Training Prison Program is run in partnership with prison authorities and local driver trainers. The theory component of the program is taught by Aboriginal Police Liaison Officers and covers a variety of topics including: pedestrians; cyclists; trip planning; driving to the conditions; road rules; travelling in Open Load Space; encouraging women to get a licence; the licensing process and registration; alcohol and other drugs; restraint use; and basic first aid. *"Its aims are to both reduce crashes and reduce the incidence of offending ... The program is very interactive involving group discussions, hands-on activities relating to vehicle maintenance and a series of mock tests at regular intervals to gauge where revision is required"* (Somssich, 2005). The major problem of the program is administrative, in that inmates serving long sentences often successfully gain a licence but it expires prior to their release.
- **Central Australian Aboriginal Media Association Sponsorship:** The *Aboriginal Road Safety Program* unit has sponsored the Central Australian Aboriginal Media Association) Footy Show. Australian rules football is hugely popular with Aboriginal people and communities throughout the Northern Territory and this sponsorship allows road safety messages to be disseminated to Aboriginal road users not only in Alice Springs, but in outlying communities.

4.5 Current or Proposed Research

No proposed research was identified. Evaluation of existing programs are ongoing.

5 WESTERN AUSTRALIAN PERSPECTIVE

5.1 Strategic Approach to Indigenous Road Safety

Like other states with a substantial Indigenous population, Western Australia experiences escalated levels of Indigenous involvement in road trauma and traffic-related offences. In response, a Task Force on Aboriginal Road Users (comprising Western Australian Road Safety Councils) was established by the Office of Road Safety in the late 1990s. This Task Force produced an unpublished discussion paper that: (i) identified the characteristics and known risk factors of crashes involving Aboriginals; and (ii) outlined the initiatives currently being undertaken by the police, transport and health departments to address Indigenous road safety and unlicensed driving. The complete community discussion paper that contributed to the current state five-year strategy – *Future Directions for Road Safety in Western Australia 2000-2005* – is housed at: www.police.wa.gov.au/Services/pdf/Discussion_Paper.pdf

Following an extensive community consultation process, the Office of Road Safety launched *Arriving Safely, the Road Safety Strategy for Western Australia 2003-2007* which has a strong focus on reducing Indigenous crashes by targeting: drink driving; speed; fatigue; and restraint use. An overview of *Arriving Safely* can be found at:

www.aph.gov.au/house/committee/trs/roadsafety/sub37.pdf

The Office of Road Safety (with 16 staff) is the co-ordinating road safety body in Western Australia and works closely with the police and transport authorities, as well as Indigenous Co-ordination Centres, Aboriginal Corporations and local Road Safety Councils to develop and implement policy and initiatives to reduce Aboriginal road trauma.

5.2 Data Quality and Crash Causal Factors

Ethnicity is not recorded by the police or the Department of Main Roads in Western Australia. However, Aboriginal status is recorded by the Department of Health for crashes requiring medical care. So, in order to link information about crashes from a variety of external databases (each recording different variables), the Injury Research Centre of Western Australia established the *Western Australian Road Injury Database* in 1989. The *Western Australian Road Injury Database*, provides valuable data for research, policy development and evaluation of road safety programmes. The database is unique in that it consists of data from police crash records, hospital discharge summaries (Hospital Morbidity Data System) and death records that have been linked using probabilistic techniques (Legge, 2001). The database includes information on: the crash site (i.e. road gradient, curvature and surface type) via geo-coding as well as lighting and weather conditions at the time of the crash; demographics (road user type, ethnicity, age, sex); injury severity; external causes of injury; medical procedures administered; and make, model, year of manufacture, and colour of the vehicles in the crash. If the police attended the crash, then the blood alcohol concentration of the drivers/riders involved and vehicle speed estimates may also be available.

“Despite the best efforts of the Injury Research Centre, the data is never 100% consistent and cases of misclassification occur ... However, the greatest strength of the linked data is that it allows analyses that are not possible using the component datasets individually. Investigating the crash experience of Aboriginal and non-Aboriginal casualties falls into this category. The crash data does not record the indigenous status of those involved in the crash, but this is available through the linkage with the hospital and death records” (Cercarelli, 2005).

Stakeholders reported that *“Aboriginal people in Western Australia are three times more likely to die in road crashes than non-Indigenous people ... Aboriginal people account for 9% of the road toll, yet only 3% of the State’s population”*. This trend is consistent with other States.

Interrogation of the *Western Australian Road Injury Database* and extensive community consultation in 2002 as part of the development of the *Aboriginal Road Safety Stakeholder*

Implementation Manual (see Section 5.3) identified the following as the Indigenous road safety priority areas for Western Australia:

- Drink driving
- overcrowding and reduced restraint use (among adults and children), including riding in the back of utes/trucks
- fatigue
- pedestrian safety (Between 1988 and 1996, 24% of fatal crashes involving Aboriginal people were as a result of 'hit pedestrian injuries'. This is nearly three times higher than for non-Indigenous people in Western Australia. In many cases, alcohol was also a factor).

In September 2004, the Office of Road Safety undertook further consultation with road safety stakeholders and Aboriginal communities which confirmed the primacy of these road safety issues.

5.3 Road Safety Initiatives and Programs

The Indigenous road safety initiatives described below are central to *Arriving Safely, the Road Safety Strategy for Western Australia 2003-2007* and are testament to the strength and commitment of community, government and university partnerships in the State.

5.3.1 'Corrugations to Highways': National Aboriginal Road Safety Video (WA, NT & SA)

Program aims

The National Aboriginal Road Safety Video was developed to reduce the rate of Aboriginal people being involved in road crashes and is widely used throughout Australia. The resource was developed through extensive advice from Aboriginal Australians from a number of jurisdictions. All segments of the video were shot in remote communities in WA, NT and SA and involve only Aboriginal people to ensure that all road safety messages are delivered in a culturally-appropriate and realistic manner. The development of the resource maximised Indigenous involvement to increase ownership of the messages contained within.

Components and delivery style

The program comprises the video and an associated workbook with complementary activities to reinforce key road safety messages. The video features 10 separate segments covering the following road safety issues:

- pedestrian safety
 - cycle safety
 - trip planning
 - driving to the conditions (including speed, road conditions and road rules)
 - getting a driver's licence and registration of vehicles
 - travelling in Open Load Space
 - alcohol and other drugs
 - restraint use (including child restraints)
-

- basic first aid and on-scene management of a crash (including management of a spinal injury).

Each segment runs for three to five minutes, but there is the option to utilise the workbook. The workbook contains a range of questions and activities to help group leaders/facilitators to identify the key issues presented in each of the segments. Group leaders may choose to conduct all or just some of the activities, to complement existing programs/curriculum, depending on the needs of the Aboriginal people in the group.

Program status

Continuing and being widely used in WA, NT and SA and to a lesser extent in other Australian jurisdictions.

Implementation barriers / cost issues

The resource is jointly owned by the transport authorities in WA, Charles Darwin University, TIO and SA Police. It is distributed free in all Australian jurisdictions to Police, Aboriginal Liaison Officers, Community Health Workers, driver trainers, teachers and Road Safety Officers to be used as educational tool in the area of road safety. The ATSB has helped fund its production and distribution (and advertises its availability on its website). No real barriers to implementation.

Evaluation

No formal evaluation. However, the resource is widely used in schools and communities throughout Australia.

5.3.2 Preliminary Monitoring of Open Load Space Legislation

Open Load Space restrictions preventing the carriage of passengers in the open tray compartments of vehicles were introduced in Western Australia on January 1, 2001. While there has been no formal evaluation, preliminary monitoring of police fatal crash reports by the Office of Road Safety for 2001 - 2003 indicates that only three deaths in total have occurred due to this illegal behaviour since the introduction of the law. This is markedly less than the six to eight deaths per annum prior to its introduction. These crash trends are consistent with reductions seen in the Northern Territory (Garrow, 1999). However, stakeholders warned that *"people are still riding in the back of utes and much more education in this area is required ... Also, with community police having limited powers it is difficult to enforce"* (Pettingill & Heimberger, 2005).

5.3.3 Aboriginal Road Safety Stakeholder Implementation Manual

As part of the current five-year strategy - *Arriving Safely*, the Office of Road Safety, in partnership with the Aboriginal Road Users Taskforce and communities throughout the State, have developed an *Aboriginal Road Safety Stakeholder Implementation Manual*. The manual and associated resources (already on CD and soon to be released online) are designed to assist road safety stakeholders and others to identify priorities for action, and the most appropriate approaches to achieve successful outcomes. It promotes a community development approach to road safety interventions, focusing on pedestrians, unsafe travel (including restraint use, overcrowding, unsafe vehicles) and drink driving. It is aimed at assisting federal, state, regional and local agencies in working with Aboriginal people to develop their own solutions to road trauma and is based on five principles:

1. Recognise community needs and the importance of community
2. local participation
3. recognise cultural differences
4. ensure program sustainability
5. allocate appropriate time for implementation.

The manual proposes strategies for planning a road safety program. It includes a resource kit and guidelines for implementing a road safety program, including information on how to build capacity within a community and stakeholder contacts lists. More information on the manual can be found at: <http://www.officeofroadsafety.wa.gov.au/>

5.3.4 Health/InfoNet Indigenous Road Safety Website

The Edith Cowan University are currently developing an Indigenous road safety website. The information resource provides a mechanism for: (i) sharing knowledge and information about Indigenous road safety programs and policies across jurisdictions; (ii) developing an online network of professionals interested in the topic area; and (iii) housing valuable process lessons (both successes and failures). The resource is funded and endorsed by the ATSB, and transport stakeholders in Western Australia, South Australia, Northern Territory, Queensland and New South Wales. It is designed for both road safety policy-makers and practitioners and communities and contains:

- information about road safety organisations, agencies and individuals (including a guest book)
- reviews of road safety issues and Indigenous Health (including data)
- details of news and events
- a bibliography of relevant documents
- a list of, and links to, relevant resources
- information on relevant road safety projects, including community projects and international projects
- grant and potential funding body details
- training program and workshop details.

The resource was officially launched at the end of 2005:
<http://www.healthinonet.ecu.edu.au/roadsafety>

5.4 Community-Based Local Road Safety Strategies

In addition to a number of government and university initiatives, Western Australian consultations revealed several comprehensive road safety strategies developed and implemented by local communities. Two examples are cited in the next sections.

5.4.1 Example 1: Ieramugadu Road Users Strategy 2004

Broad Program Strategies

- Build capacity within the Roebourne Shire and in particular assist community based organisations to develop and deliver road safety projects
-

- develop and implement prevention education strategies
- conduct one-to-one client education
- conduct community education, continued public education and awareness days
- work in partnership with Roebourne Police to develop appropriate and relevant training programs for Aboriginal Health Workers, Aboriginal Police Liaison Officers and mainstream police and other interested staff
- develop community based education programs, targeting male and female road users, and children.

The Program Aims and Objectives

- increase community awareness of road safety as a high priority
- provide information to the indigenous community, which will provide them with motivation to change road user behaviour and make road wise decisions
- improve access to child restraints
- increase the numbers of males that are holders of current driver's licences
- increase the numbers of females that are holders of current drivers' licenses
- reduce the numbers of drivers who display poor road user behaviour
- increase community awareness of fatigue as an issue and a priority
- reduce the numbers of indigenous people who drink and drive
- reduce the numbers of indigenous pedestrian death and injury
- improve pedestrian behaviour.

Strategic Partnerships

The issues associated with safe road user behaviour are complex and cannot be solved simplistically by one single service provider. There are a number of interested and willing key strategic stakeholders who wish to be involved in indigenous road safety programs. These include:

- Mawarnkarra Health Service Aboriginal Corporation
 - Roebourne Police Station
 - Police Road Safety Section, W.A Police Service
 - Pilbara Population Health Unit, Pilbara Gascoyne Health Service
 - Pilbara Community Drug Service Team
 - Ngarluma/Yinjibarndi Foundation
 - Yaandina Day Care Centre
 - Roebourne Enhancement Scheme
 - Office of Road Safety, Department of Planning and Infrastructure
 - Roebourne Shire Roadwise Committee
 - CDEP
-

- Employment Directions Network
- St John Ambulance.

Strategies

- Establish relationships and working partnerships with other agencies and departments, including the Pilbara Population Health Unit and Roadwise
- develop and foster key strategic partnerships to reduce the incidence of road related injury and death for Indigenous clients in the Roebourne Shire
- create more effective linkages between The Office of Road Safety and the Karratha Roadwise Community Committee
- involve community groups in the Roebourne Shire.

Current Action

Mawarnkarra Health Service and Roebourne Police will continue to be members of the Karratha Roadwise Community Committee.

5.4.2 Pedestrian Safety

The hospitalisation rate for Aboriginal people from road crashes is higher than for the non-Aboriginal population, with Aboriginal pedestrians heavily over-represented in the figures (608.9 per 100,000 of the Aboriginal population, compared with 216.1 per 100,000 non-Aboriginal people).

Pedestrian Safety is an issue in Roebourne. The main concerns are:

- the lack of suitable and safe places to cross the roads
- poorly lit roads
- the 60km speed limit, on Roe Street (which is the main highway, through the town).

Strategies

- continued involvement with the Roebourne Enhancement Scheme to develop 'safe meeting' places
 - conduct community education, focussing on safe pedestrian behaviour
 - decrease the speed limit on Roe Street to 50km per hour
 - designate 'safe crossing spots' on Roe Street.
-

Current Action

The Roebourne Enhancement Scheme is coordinating a group of key stakeholders to plan and develop a 'safe' meeting place for local Aboriginal people. This safe meeting place will move locals away from the main highway.

5.4.3 Alcohol and Driving

Hospitalisation rates for Aboriginal people are almost certainly even higher, as some Aboriginal people admitted to hospital may have been recorded as being non-Aboriginal, as well as, many Aboriginal people injured in road related crashes, do not receive hospital treatment and therefore are not recorded. On occasions, Aboriginal people may present at a hospital a day or more after the crash, claiming that the injuries were sustained by some other means. At the time of the crash alcohol may have been involved or the Aboriginal person may not have had a licence to drive the vehicle.

Strategies

- Implement community based education, using a variety of methods
- survey Indigenous road users in the Roebourne Shire to determine community perceptions of road safety as a priority and contributing factors to road user behaviour
- promote road safety as a community priority
- implement a community education and awareness day incorporating road safety and alcohol. For example, develop education campaigns using media
 - continue television messages
 - posters, pamphlets and stickers
- provide fatigue education and implement *Driver Reviver* Stops-these will be planned for occasions such as funerals, sporting activities and meetings (both cultural and business related).

5.4.4 Restraint Use

Many Aboriginal people in the Roebourne Shire wear seatbelts and have their children correctly restrained. However there are many who do not. The last fatality in the Shire involved alcohol and no restraints were worn.

Strategies

- Conduct whole community and one-to-one education on restraint use for both adults and children
 - promote the child restraints project
 - conduct whole of community and one to one education for adult restraint use.
-

Current Action

A child restraints project was launched in June 2004.

5.4.5 Fatigue

Fatigue is a major contributing factor to road trauma. Driver tiredness is also acknowledged as a contributing factor to crashes in this region. Indigenous people travel great distances especially when travelling to funerals, cultural and sports events. Oftentimes a driver will travel on long distances for up to 8 hours without having a break.

Strategies

Roebourne Police will design and develop culturally secure and sensitive Driver Reviver Stops.

5.4.6 First Aid Training

The Roebourne Shire and surrounding areas can either be defined as rural or remote, in terms of access to appropriate emergency services. Many times when there is a crash, St John Ambulance officers are the first point of contact. As is the case in other areas across the nation, first aid training is almost an essential criterion to living in a rural or remote area. Many more lives can be saved if more people were first aid trained.

Strategies

Promote first aid training for indigenous road users in the Roebourne Shire.

5.4.7 Corporate Road Safety

A number of indigenous working-women have identified driving and road safety as a work related issue. The interested group, ten in number, drive different vehicles and have differing needs. The vehicles include:

- a mini-bus (which transports children)
- a troop carrier (which is used to transport staff and clients)
- cars (sedans and station wagons).

Strategies

Design and implement a Corporate Women's Driver Course. The course is held over a one day period and the content will include:

- hazards on Roads (including animals-what to do to avoid them)
 - simple Vehicle Checks (oil, water etc)
 - pedestrians (How to avoid them, safely)
 - Where is the best place in the vehicle to sit a child? Are any areas of the vehicle safer than others?
 - general driving tips-what to do when a mini-bus is blown around by strong windy conditions.
-

Regional Differences

There are distinct differences with how indigenous people travel in and around the Roebourne area. For example, many people use what are termed 'the back roads'. Generally the people who use these roads either:

- do not have current driver's licences
- have unroadworthy vehicles
- are under the influence of alcohol.

There are a number of reasons why drivers of vehicles do not have current licences. These reasons include:

- fear of the process required to obtain a licence
- lack of a suitable vehicle to learn to drive in
- fine suspension of a driver's licence and not understanding the process with which to go through in order to be able to drive.

5.4.8 Driver Licensing

Strategies

- Increase the numbers of indigenous people who are holders of current driver's licences
- work in partnership with Employment Directions Network to implement a driver-training project
- implement a culturally secure women's driver training course.

Evaluation/Performance Indicators

- The numbers of men and women who successfully obtain driver's licences
- the numbers of times that the community vehicles were booked out
- the numbers of women who participated in the women's driver training course.

Tracey Heimberger and Tuesday Lockyer report that the Mawarnkarra Health Service Aboriginal Corporation and Roebourne Police Station are committed to evaluation. Evaluations of a child restraint project and drink driving awareness campaign are already being undertaken with the help of the Injury Research Centre (Dr Rina Cercarelli).

5.4.9 Example 2: Derby/West Kimberley Roadwise

Roadwise is the Western Australian Local Government Association's Community Road Safety Program and has been in operation since 1994. Derby/West Kimberley Roadwise is extremely active in the area of Indigenous road safety, particularly in encouraging increased pedestrian visibility and restraint use. Some of their more recent initiatives include:

- public education in both schools and communities
 - *Driver Reviver Program*
 - *Belt Up Cup* – football sponsorship
 - road safety education at football games (including giveaways for wearing seatbelts)
-

- infant safety capsule checking
- *Gibb River Road Safe Driving Guide*
- *"Lights On" Campaign*
- reflective wrist band trial and associated road safety advertisements
- walksafe signage
- safe routes to school programs
- streetscape improvements (solar powered lighting to increase visibility)
- sponsorship of the Derby 2004 Crocfestival – *"No Belt, No Chance"*.

5.5 Current or proposed research

Evaluations are proposed for most Western Australian initiatives.

6 VICTORIAN PERSPECTIVE

6.1 Strategic Approach to Indigenous Road Safety

Given that only 0.6% of the Victorian population is Aboriginal (the lowest proportion of any Australian jurisdiction), Indigenous road safety is not a major priority. As such, *"the majority of road safety initiatives in Victoria are mainstream and generic, targeting all Victorians including Indigenous people"* (Frauenfelder, 2005). Any decisions pertaining to Indigenous road safety are the responsibility of Aboriginal Affairs Victoria, VicRoads and the Victorian Police Service. However, there are a few road safety initiatives specifically targeting Indigenous road safety.

6.2 Data Quality and Crash Causal Factors

To date, ethnicity is not recorded in either the crash reporting or licensing processes. As such, estimates of Indigenous crash risk are determined through hospital admissions and coronial data. Monash University in Victoria has recently established a National Coronial Information System which should facilitate a better understanding of Indigenous crash trends. This system will be available to all jurisdictions and will allow comparisons across the country. Further information on the National Coronial Information System can be found at: <http://www.vifp.monash.edu.au/ncis/>

Like other jurisdictions, Indigenous people are most likely to be involved in serious road crashes as passengers or pedestrians, with alcohol often being a major contributing factor.

6.3 Road Safety Initiatives and Programs

There are very few road safety initiatives specifically targeting Indigenous people. However, the Victorian Police Service has recognised a need to do more in this area. Swinburne TAFE student, Senior Constable Melissa Peters (Aboriginal Advisory Unit) was awarded the 2005 Victorian Training Award for Outstanding Student of the Year in the Koori category. Senior Constable Peters (featured in the August 2005 edition of the Koori Mail) developed a resource kit for police stations in the Western suburbs. The resource identifies all Aboriginal organisations and service providers in the area, ranging from domestic violence centres, drug and alcohol centres, housing boards and Aboriginal co-ops etc. *"The goal of the resource and the newly formed 'Gathering Place' Steering Committee is to link the police force (and other interested government departments) to community organisations, so that police officers are not just dealing with the criminal element of society, but also trying to rehabilitate people ... The importance of improving relationships between police and Koori communities to improve road safety and reduce crime cannot be overstated"* (Finnegan, 2005).

The Victorian Police Service and VicRoads have also developed a pre-licensing training course to assist persons with literacy problems – the Hawthorn Community Education Centre Pre-Drivers' Course.

6.3.1 Hawthorn Community Education Centre Pre-Drivers' Course

Program aims

The course aims to improve basic literacy and communication skills, create greater awareness of road safety and related topics, increase self-confidence and independence, and help to prepare students for the learners permit test (in either written or oral form). This course is for adults (predominantly male) with a mild intellectual disability or from minority populations (i.e. Koori kids). This program also aims to ensure participants are able to liaise with and have a comfortable attitude towards the local police and other authority figures such as VicRoads staff.

Components and delivery style

The course is presented in small informal groups, which is a non-threatening. The course is run over 40 weeks at two hours, one day per week. The focus is on preparing for the learners permit, whilst at the same time, other knowledge, content, and skills are introduced. The skills gained include: literacy, social and knowledge (understanding of road rules). Where possible, the learning is hands on or experiential which is suited to Indigenous learning styles. The course uses a variety of teaching materials and enhances students' interpretation of resources such as:

- Road to Solo program (VICROADS)
- telephone books (white & yellow pages)
- street directories
- Bus/Train/Tram timetables
- local signage
- VicRoads brochures
- composing, writing, and sending letters
- making phone enquiries/calls and taking messages
- resources that contribute to safety and competence as a public transport user.

Program status

The program is still active and has now been running for three years at the Hawthorn Education Centre and in selected secondary schools.

Implementation barriers / cost issues

The course costs \$10 per term (\$40 per year), and as it is delivered through the adult education system. It is subsidised through the Victorian Education Department.

Evaluation

No formal evaluation has been completed. However, based on observation, commitment, an indication of enjoyment and involvement of participants, the course is proving successful. Formal and informal feedback from families and community workers indicate that participants have an increased confidence, with some successfully obtaining probationary licences, and others resolving to the fact that they not equipped to proceed with the written test and will be informed pedestrians, which is an indication of their greater self awareness.

Additional initiatives

The Hawthorn Community Education Centre also offers a *Wiser Driver Program* which assists older people to retain a licence for as long as it is safe to do so, while empowering them to know when it wise to surrender their licence. Mobility has been recognised as the key to participation, and the program has been designed accordingly. Remaining mobile is a major issue for an increasingly aging population. The course is discussion-based group work, run in two-hour sessions over a four-week period. Facilitators are trained, mature educators, rather than safety experts. Peer group learning has proven effective and acceptable to older people as it breaks down inhibitions.

Topics covered include:

- changes to road rules, driving conditions and licensing arrangements
-

- the affects of ageing and medical conditions
- the facts about crashes, roadworthiness for cars, pedestrian safety, and strategies for the future.

In 2003, approximately 500 people had participated in the program, while 300 took part in 2001/02. A formal evaluation has not been completed, however, it is a community owned program, with an advisory group made up of elderly residents. While the program does not specifically target Indigenous populations, its use of simple language and very visual and anecdotal learning aids (videos and personal experiences) makes it highly suitable for Indigenous participants.

6.4 Current or proposed research

No current or proposed research.

7 TASMANIAN PERSPECTIVE

7.1 Strategic Approach to Indigenous Road Safety

Given that only 3.7% of Tasmania's population are Aboriginal, Indigenous road safety is for the most part subsumed under mainstream programs. The agencies directly responsible for Indigenous road safety in Tasmania are: (i) the Land Transport and Safety Division of the Department of Infrastructure, Energy and Resources; and (ii) the Community Policing Unit (20 staff) and the Crime Prevention and Community Safety Council attached to Tasmania Police.

The few road safety initiatives targeting minority populations (Indigenous Australians and Sudanese) are delivered through the Community Road Safety Partnerships Program which became operational in November 2003 and is central to the *Tasmanian Road Safety Strategy 2002-2006*.

7.2 Data Quality and Crash Causal Factors

Ethnicity (racial appearance) has only been recorded in the police crash reporting process for the last year, so the accuracy of the data is still improving. Health and coronial data is typically used to make racial comparisons regarding crash risk and causal factors. Ethnicity is not recorded as part of the licensing process.

Intoxicated driving, unlicensed driving, speeding on rural roads and unroadworthy vehicles were identified by stakeholders as the major factors contributing to crashes involving Indigenous Tasmanians.

7.3 Road Safety Initiatives and Programs

The *Community Road Safety Partnerships* (CRSP) Program is an initiative of the Department of Infrastructure, Energy and Resources and 12 local councils throughout Tasmania: Break O'Day; Brighton; Burnie; Dorset; Georgetown; Glenorchy; Glamorgan Spring Bay; Hobart; Kentish; Kingborough; Launceston; and West Tamar. The program is important because it focuses on local communities and what can be achieved at a grassroots level. It maximises the delivery of road safety activities by linking existing community networks (road safety interest groups) with police and transport authorities.

CRSP road safety initiatives directly impacting on minority populations include:

- A recently launched Baby Capsule Hire Service which enables low income families to hire capsules for \$2 per week for a six month period. This service is funded and supported by Tasmania Police and the Royal Automobile Club of Tasmania (RACT). Associated with this service are regular Child Restraint Check Days which are widely promoted through local newspapers and childcare centres
 - 'Mock Crash' sessions conducted in a number of Tasmanian high schools by the State Emergency Service (SES) and Tasmania Ambulance Service to illustrate road safety principles (eg. inattention, speeding, drink driving, etc.). These sessions are well advertised and open to the general public
 - The *Turn Right* program which requires novice drivers to attend practical sessions, study road rules, pass the driver's knowledge test, gain a learner's permit, and ultimately complete 50 hours practical driving under supervision. Local volunteers donate their time to provide supervision and police provide safety demonstrations on roadworthiness of vehicles, speed and stopping distance, and the impact of alcohol and drugs on driving. The theory training utilises the '*Keys Please*' curriculum which is also used in Victoria
-

- The Land Transport and Safety Division of the Department of Infrastructure, Energy and Resources coordinates Tasmania's 'First Gear' Learner Licence Assistance Program. 'First Gear' is offered free through health centres (eg. Tasmanian Aboriginal Health Centre) and employment agencies to encourage at-risk (marginalised) and low literacy youth to obtain a licence. It comprises four x 1½ hour lessons in small groups with a joint focus on road rules and safe driving. RACT staff and community police assist in the delivery of the program. Eighteen Indigenous participants have obtained a learner's licence through the Tasmanian Aboriginal Health Centre since its first session about four months ago
- Linked closely with the 'First Gear' Learner Licence Assistance Program, is *Project U-Turn* offered through the Crime Prevention and Community Safety Council attached to Tasmania Police. Project U-Turn is a 10 week automotive course for youth who have stolen cars or at-risk of stealing cars
- Drink driving radio advertising has been extensive in Tasmania (SeaFM), coupled with a statewide designated driver campaign ("*Who's DES Tonight?*"). The initiative has been linked to the national *Recording Artists, Actors and Athletes Against Drink Driving* (RADD) campaign and involves a variety of local celebrities (i.e. Ricky Ponting, David Foster and Russell Robertson), as well as well known Indigenous sportspeople (i.e. Michael Long, Jason Gillespie and Andrew McCleod). Mentoring programs have been shown to influence Indigenous behaviour, so the RADD initiative appears to have potential and should be evaluated in due course
- The "*Forgotten Something?*" seatbelt campaign has led to the erection of signs at car park exits in urban and rural areas reminding people to buckle up.

7.4 Current or proposed research

No current or future research proposed, other than an evaluation of CRSP initiatives.

8 NEW ZEALAND PERSPECTIVE

8.1 Strategic Approach to Indigenous Road Safety

Given that Maori and Pacific peoples comprise over 21% of the total population in New Zealand, it is not surprising that Indigenous road safety is a priority. Land Transport New Zealand is the agency responsible for Indigenous road safety. It is a new government agency formed in December 2004 from the merger of Transfund New Zealand and the Land Transport Safety Authority (LTSA) under the *Land Transport Management Amendment Act 2004*.

According to Mr Roger Maxwell (Community Programmes Manager, Land Transport New Zealand), the inception of Land Transport New Zealand *"has broadened the ethos of the department to not only include access and sustainability, but to give more prominence to safety ... There is now a dedicated fund for cultural strategies – responses and programs – targeting Maori and Pacific peoples ... Our [Community Programs] goal is to inform communities in the areas of transport regulation, compliance, safety and licensing"* (Maxwell, 2005). Despite structural changes, there remains a strong emphasis on the importance of families, professional development, and active participation to encourage community ownership of road safety programs.

These goals are being achieved through *"improved relationships with communities developed through the establishment of Road Safety Councils at local authorities"* (Maxwell, 2005). Without any real deliberate recruitment policy, the Land Transport Safety Authority has also become a very multi-cultural organisation with strong Indigenous representation. *"The ethnic breakdown of staff now reflects the broader population ... In 2000, three of 74 staff were Maori, yet now 20 of 74 staff are Maori ... These staff are spread throughout the department and have key roles in community-based service delivery and the evaluation of program ... The Community Road Safety Programme (CRSP) has been in operation for 15 years and its continued success is a product of inclusiveness, community involvement and increased cultural understanding, backed by government support"* (Maxwell, 2005).

8.2 Data Quality and Crash Causal Factors

In the last three to four years, ethnicity has been recorded as part of the crash reporting process in New Zealand. However, there are still accuracy problems associated with a lack of self-identification – *"people sometimes don't want to be reminded of their heritage"* (Maxwell, 2005). Data from the health sector (Health Information System) on mortality and hospitalisations remains the most accurate indicator of crash involvement. Data limitations aside, it appears that Maori and Pacific peoples are twice as likely as other New Zealanders to be killed in a traffic crash.

The primary road safety concerns among Maori and Pacific peoples are: speed; alcohol; poor driver behaviour (risk-taking and breaking the law); non-wearing of restraints (particularly among passengers); and poor/illegal pedestrian behaviour. Mr Maxwell suggests that *"many of these problems could be addressed through attitudinal change – particularly regarding restraint use – although it is not easy to do"* (Maxwell, 2005).

8.3 Road Safety Initiatives and Programs

Nearly all programs targeting road safety for Maori and Pacific peoples are funded and supported by the Community Road Safety Programme (CRSP) which is administered by Land Transport New Zealand. Some of the projects offered under the CRSP umbrella (with some funding support from external agencies) include:

- Several programs (coordinated by local Road Safety Councils) assisting Maori and Pacific peoples to obtain a driver's licence in a comfortable environment (i.e. local trainers with cultural-sensitivity and experience in teaching people with low literacy, use of local language, held in community settings other than police stations etc.). Land Transport New Zealand provides guidance to course providers on road rules, licensing requirements and safety issues
- Annual Youth Road Safety/Road Trauma Hui (gathering) aimed at educating young Maori and Pacific peoples on the dangers of drink driving and inappropriate speed
- 'Street Talk' courses delivered to Maori learner drivers by the Manukau Urban Maori Authority (MUMA). The course consists of a series of six sessions, each of which focuses on changing driver attitudes through critical self-reflection. Learner drivers compile a logbook of their driving and discuss their experiences with trainers and other course participants. Successful completion of a course allows drivers to reduce their time on a restricted licence by six months. MUMA employs Maori trainers to deliver the course to Maori students
- Newly introduced 'Drive Time' seminars for novice drivers and their trainers. The two-hour seminars (accompanied by a comprehensive resource kit) are designed to encourage novice drivers to increase their number of supervised driving hours and improve the quality of training given by parents and other supervisors. To date, it has been trialed in Wellington, Nelson and Wairarapa, but there are plans for it to be delivered on a national scale
- The running of a first time minor driving offence program targeting at-risk Maori and Pacific youth
- An on-line chat facility and regular forums with Maori Road Safety Coordinators to provide them with resources and training to deliver road safety interventions to their local Maori community. The interactive site is housed at: www.crsp.net.nz/groups/coordinators/index.php
- Activities to assist older Maori and Pacific drivers with the licence renewal process and when surrendering their licence to maintain independence
- The provision of 1000 child car seats to high-risk Maori and Pacific families in 2003 at reduced rent to increase usage rates (sponsored by the Accident Compensation Corporation, MUMA and Family Start).

The Te Wananga o Aotearoa's Rotorua police service's national certificate in police and security duties (first identified in a review in 2002/03) has also led to a substantial increase in the number of Maori and Pacific people joining the police force. The development of this course was guided by the notion that Maori and Pacific people are in the best position to inform crime prevention and road safety directions among their people. This program has been linked to a significant reduction in Indigenous road trauma and crime and provides strong precedence for a greater involvement of Australia's community police in road safety initiatives.

8.4 Current or Proposed Research

Land Transport New Zealand is currently working on a research project with Otago University School of Medicine to examine the quality of crash-related injury and mortality data and ways to encourage police to record ethnicity. *"If we want police to record ethnicity we need to provide a clear rationale for its collection ... The reason to collect this information is to provide a clearer picture of crash causation, not to make things different or easier for different ethnic groups"* (Maxwell, 2005).

The Community Road Safety Programme has also been independently evaluated by McDonald Management Contracting. The evaluation - <http://www.ltsa.govt.nz/crsp/final-review-report.pdf> -

deemed the program to be highly regarded by stakeholders and fairly aligned with the core community development philosophy. As data quality and consistency improves, the CRSP staff hope to be able to demonstrate positive change on concrete road safety outcome measures.

9 AMERICAN PERSPECTIVE

9.1 Strategic Approach to Indigenous Road Safety

Working with Native American peoples has historically raised special issues for United States transport authorities because of Native American sovereignty over lands. As such, constructing roadways through reservations and traffic law enforcement on native lands has often not been met with support. In response, the National Highway Traffic Safety Administration (2003) recognised a need for staff to work collaboratively with communities and attend tribal meetings to discuss transport and safety issues. This led to the development of the *Safe Tribal Communities' Injury Prevention Model* which has been adopted by over 25 Native American tribal communities. The model identifies road trauma as a priority and is based on the premise that: (i) injuries are predictable and preventable; and (ii) local people (with government support) are best equipped to solve local problems. The model proposes seven steps to address road safety and transport issues in Native American communities:

1. form a coalition – recruit stakeholders, a lead organisation, a coordinator, an injury data expert and set meeting times and locations
2. create a tribal profile – using demographic data, roadway usage/exposure data and environmental data
3. examine local injury data – from hospitals, health services and police
4. prioritise injury problems using data – based on injuries, costs and concern among tribal members
5. organise subcommittees – these may include health officials, police, businesses, educators, emergency services, tribal leaders and tribal members
6. identify and implement prevention strategies – enforcement, education and/or engineering based interventions
7. measure the cost-benefit impact of strategies – using injuries, implementation costs, behaviour change, resource usage and tribal attitudes as outcome measures.

9.2 Data Quality and Crash Causal Factors

Like most Australian jurisdictions, ethnicity is not recorded by transport authorities in either crash or licensing databases. However, the use of health data (Centres for Disease Control and Coronal information), linked to the National Highway Traffic Safety Administration's Fatal Analysis Reporting System (FARS), has enabled racial comparisons regarding crash risk. Consultations revealed that Native Americans are twice as likely to die in motor vehicle crashes than other population groups in the United States (including African Americans). According to the National Center for Injury Prevention and Control (2004), motor vehicle crashes and pedestrian-related injury are the two leading causes of unintentional injury-related death among Native Americans over 20 years of age.

The major causal factors in crashes involving Native Americans are lack of restraint use and/or alcohol impairment (both in vehicle and pedestrian crashes), despite alcohol being banned in the Pawnee Nation and most reservations.

9.3 Road Safety Initiatives and Programs

In 2003, the United States Secretary of Transportation passed the *Safe, Accountable, Flexible and Efficient Transportation Equity Act* (SAFETEA) with a \$256 billion dollar budget attached. This legislation allows tribal governments to compete annually for \$50 million in grants to address impaired driving. SAFETEA also ascribes: \$10 million to a new *Indian Reservation Rural Transit Program*; \$2 billion to the *Indian Reservation Roads Program*; \$13 million to the

Indian Reservation Roads Bridges Program; and \$36 million over six years to road safety programs in Native American communities (Mineta, 2004). Notable road safety initiatives already introduced by tribes include:

- passing safety-belt-use laws and .08 blood-alcohol-level laws
- conducting safety belt, child safety seat, and sobriety checkpoints
- participating in safety belt and impaired driving enforcement mobilizations
- instituting court programs for 'driving while intoxicated' offenders
- enactment of an '*Underage Drinking Policy*' by the Pawnee National Tribal Council to enable flexible sentencing from Pawnee tribal courts (similar to drug courts which have proven successful in the Indigenous context in Australia and America)
- local street lighting initiatives (as cited in the literature review)
- training Child Passenger Safety Technicians in local communities.

At a national level, the Indian Health Service (IHS) has been committed to developing and providing funding for effective strategies to motor vehicle injuries among Native American tribes since 1985. Its flagship initiative is the *Safe Native American Passengers* (SNAP) program. The culturally-appropriate SNAP program was developed in partnership with tribal staff to introduce students to the basic concepts of child passenger safety. The course targets people working in Native American communities and comprises eight hours of instruction and four hours of fitting station experience.

The *Local Technical Assistance Program* (LTAP) and *Tribal Technical Assistance Program* (TTAP) were established in 1982 by the Federal Highway Administration (FHWA) to provide technical transport assistance to the 38,000 local communities in America. There is one LTAP centre in every state, Puerto Rico and regional centres serving tribal governments. LTAP and TTAP centres supply local transport staff with: an information clearinghouse; professional training (including videos and written materials); new and existing technology updates; and personalised technical assistance. Professional training to tribal members is of a high quality and includes such units as:

- pedestrian safety (4 contact hours)
- road safety issues - general (4 contact hours)
- road safety management (4 contact hours)
- low cost safety improvements (4 contact hours)
- data management (4 contact hours)
- occupational health and safety (12 contact hours)
- highway safety fundamentals (4 contact hours)
- traffic records (4 contact hours)
- safety belt use (4 contact hours)
- local roads transport planning (16 contact hours)
- Native American Cultural Resource Monitor Training (16 contact hours).

Each year the program grows and in 2003 LTAP/TTAP centres provided 4,892 training events, totalling 36,650 hours of training to 138,505 participants. United States Department of Transportation estimates that \$8 is saved for every \$1 spent on the program. More information on LTAP/TTAP and some promising tribal initiatives (i.e. Michigan's Equipment Operator Safety Course, Northern Plains Commercial Driver's Licence Course) can be found at:

<http://www.ltapt2.org/>

9.4 Current or Proposed Research

Dr Jay Shore (American Indian and Alaska Native Programs, University of Colorado) cited a common shortcoming of behaviour change programs in the Indigenous context in both Australia and America. He claimed that most programs focus on changing the individual, rather than community attitudes. However, in the Indigenous context, the role of community attitudes/beliefs and circumstantial factors are much more important than individual factors.

Dr Shore is interested in Australian research that looks beyond individual factors contributing to trauma or injury. Shore and Spicer (2003) proposed a model for understanding alcohol-mediated violence in an Australian Aboriginal community. Based on ethnographic and survey data collected in a Queensland Aboriginal community, Shore and Spicer provided evidence for a model that proposes three major components affecting the function of alcohol use and its relationship to violence in the community. These are:

- *Circumstantial factors:* Setting and background precursors to alcohol use and violence in the community (eg. location, access to employment and services, community tensions, population density, immediate circumstances)
- *Community factors:* Community held beliefs and expectations about “being drunk” and the social control of the emotion that is associated with alcohol-mediated violence (i.e. shame/pride associated with the behaviour, community acceptance of the behaviour and risk perception)
- *Individual factors:* Expectations and beliefs held by the individual about “being drunk” and the effect of alcohol on an individual’s emotional state (i.e. individual’s acceptance of the behaviour and risk perception).

Dr Shore is currently providing advice to Mr Edmonston (Queensland) on a research project designed to quantify the role of *circumstantial factors*, *community factors* and *individual factors* in road safety and tease out cultural and environmental contributors impacting on Indigenous crash involvement. The findings of this study will obviously have important implications for focusing road safety initiatives (i.e. campaigns targeting community versus individual change).

10 CANADIAN PERSPECTIVE

10.1 Strategic Approach to Indigenous Road Safety

Canada has yet to look at a strategic approach to address Aboriginal and First Nations road safety. In the last four to five years, the First Nations and Inuit Health Branch (FNIHB) of Health Canada (the Federal Department responsible for delivering or ensuring the provision of Public Health services to First Nation peoples living on reserve land) established a national Working Group for First Nations and Inuit Injury Prevention.

In early 2005, this Working Group put together a strategic plan to begin dealing with the leading cause of death among First Nations people of Canada, namely injuries. The leading cause of injury and death to this population are motor vehicle-related deaths. *“Unfortunately though, the problem is a little more complicated in Canada because provincial government rarely deals with the First Nations people. The First Nations people have a treaty with the federal government and most policies are dealt with at the federal level. It will be a while before it comes down to us at the working level. Unlike Australia, Indians here live on reserve and are covered at times by different processes, structure and law”* (Yacoub, 2005). The strategic plan is to be activated in the near future, with the various regions of Canada beginning to hire coordinators to address injuries. However, regional priorities will vary according to injury epidemiology.

The Royal Canadian Mounted Police (RCMP) and other national partners have a 2010 vision to reduce traffic-related morbidity and mortality. To date, their focus has been mostly on urban populations, but they are currently carrying out rural seatbelt-wearing surveys to determine baseline restraint use rates. However, due to insufficient resources, they have minimal data on wearing rates in only a few Aboriginal communities. Sporadic efforts are being made by a variety of agencies in an attempt to measure this indicator of traffic safety and introduce preventative interventions based on the findings.

In late 2002, a coalition was formed in the province of Alberta to address Aboriginal road safety and transport issues. The coalition involved Provincial (State), Federal, First Nations and non-First Nations Aboriginal (Metis) groups. This coalition organised the first Alberta Traffic Safety Conference in 2003 and produced the report – *“Saving lives on Alberta’s roads: Report and recommendations for a traffic collision fatality and injury reduction strategy”* (McDermid, 2004). Unfortunately, thus far the Task Groups (formed under the auspices of Alberta Transportation) have been unable to encourage adequate Aboriginal participation. This is currently the main priority and discussions are being held with individual communities.

10.2 Data Quality and Crash Causal Factors

As for national data, Transport Canada does not collect any data by ethnicity, neither do the police forces, although they may indicate on their investigative forms that the person may have self-identified as Aboriginal or First Nations people. Statistics Canada provide vital stats on ‘cause of death’ and are able to verify the ethnicity of persons killed. National Health Canada is now working collaboratively with their provincial colleagues in the Department of Health to obtain similar data for hospital separations and emergency room (ER) visits. Medical Examiner databases can also identify Aboriginal deaths due to various causes, including injuries and contributing factors such as alcohol impairment. National Health Canada currently has a hospital ER-based program (15 paediatric and general hospitals involved across Canada) for surveillance of childhood injuries; it does identify ethnic background. An analysis of the data for the Aboriginal children is planned for the near future and can be made available to the National Indigenous Road Safety Working Group when completed.

The main area that continues to receive attention in the communities is occupant restraint. There is hardly any enforcement of traffic acts on Aboriginal lands. Some community-based activities have taken place as communities express interest to do ‘driver education’, ‘ATV

education', 'bicycle safety' etc. There is no national funding appropriated to carry out these preventative measures. Innovative approaches have been attempted by various regions to address the leading cause of death among First Nations people of Canada.

10.3 Road Safety Initiatives and Programs

There are very few programs in Canada dealing specifically with traffic issues and First Nations people, but the Alberta Centre for Injury Prevention and Control (ACICR) is trying to target this area through the First Nations and Inuit Health Branch (FNIHB) of Health Canada. The first step in this process has been the identification of traffic safety stakeholders to determine priority areas for intervention.

10.4 Current or Proposed Research

Dr Peter Rothe [peter.rothe@ualberta.ca] at the Alberta Centre for Injury Prevention and Control (ACICR) is currently measuring seat belt wearing and the impact of other social dimensions on traffic safety in First Nations and Aboriginal communities. This research is very much in its infancy and should be followed up in the next national Indigenous road safety review.
